

RE-CONCEPTUALIZING SMALL BUSINESS PERFORMANCE FROM THE OWNER-MANAGER'S PERSPECTIVE

Owner-managers make decisions and manage their firm as governed by the manner in which they conceptualize or “conceive” performance for themselves and their firm, rather than being governed by researchers’ and experts’ conceptualizations of small business performance. Based on survey data obtained from 433 Canadian small businesses, this study aims at a deeper understanding of what owner-managers conceive performance to be, and how this conception is influenced by their entrepreneurial or strategic intent.

Introduction

Performance is a simple concept for some, and a complex one for others (Palmer and Parker, 2001). For instance, in the case of a small enterprise, while the owner-manager will seek a decent living for his family, his or her banker will consider the realisation of profits and the generation of liquidities, whereas a socio-economic counsellor to the firm will target job creation and the firm’s growth. Now, this diversity may be a source of incomprehension or even conflict between the various stakeholders in the small firm’s performance (Raymond, St-Pierre and Marchand, 2009).

To be fully explained, small business performance must be studied in its context. It thus becomes important to understand the growth trajectories of these firms, as well as their development strategy as manifested by the strategic intent of their owner-manager (Ice, 2007). However, financial performance is often presumed to be the only form of performance sought by small business owner-managers. A measure of performance focused on financial aspects paints an incomplete portrait of the firm’s capacity to respond to the expectancies of its stakeholders and does not allow the identification of “promising” small businesses. This narrow conception of performance has long dominated, unfortunately, in the entrepreneurship literature and has influenced the governments, public agencies and other stakeholders seeking to support and assist small businesses (Blackman, 2001). Hence, greater relevance and usefulness of public policies and programs presuppose a deeper knowledge of the functioning of small businesses with regard to their performance (Julien, Raymond, Abdul-Nour and Jacob, 2004).

The “organic” link between the head of a small business and his or her enterprise is such that the organisation’s strategic choices and managerial practices are marked by the latter’s motivations and objectives (LeCornu, McMahan, Forsaith and Stanger, 1996). The study of small business performance thus cannot avoid the personal objectives of owner-managers, as these objectives are most often in

symbiosis with those of the firm (Jarvis, Curran, Kitching and Lightfoot, 2000). The preponderant influence of the owner-manager can explain the great heterogeneity that is observed for these firms. This heterogeneity can also be explained by the permeability of the SME to its socio-economic environment, that is, by the fact that it is an open system (Busi and Bititci, 2006). Evolving under conditions that are unique to them and in varied and constantly changing business environments of which they have no control, small businesses must have the ability to adapt in order to survive (Vicenzi and Adkins, 2000).

The contingent situation, described above, may produce very diverse enterprise profiles with regard to strategic choices/objectives and organisational performance measurement practices (aspects measured, indicators, targets, use of performance information). The performance measurement tools made available to owner-managers should then be in accord with their own conceptualisation of performance. Now, do these tools, and especially the measurement tools focused on financial performance in general and on growth and profitability in particular correspond to the owner-managers' conception, vision or mental model of their firm's performance? And first of all, how does the head of a small business conceive his or her firm's performance?

In order to provide an initial answer to these questions, this paper proposes and tests a research model that aims to better understand small business performance as conceived by the owner-manager. It presents the results of a survey of 433 owner-managers of small manufacturing businesses in the province of Quebec, Canada. The first section presents a literature review of entrepreneurial motivations and important issues in the conceptualisation and measurement of small business performance. It is followed by a presentation of the conceptual model, the research method, the results and their discussion, the study's limitations and a conclusion.

Entrepreneurial Motivations and Objectives

The objectives pursued by small business owner-managers differ, as well as the reasons for which they embrace an entrepreneurial career (Cassar, 2007; Gundry and Welsch, 2001; Kotey and Meredith, 1997; Morris, Miyasaki, Watters and Coombes, 2006; Saddler-Smith, Hampson, Chaston and Badger, 2003). Taking these objectives into account, and more generally the factors linked to the owner-manager's entrepreneurial profile can help in understanding the functioning of this type of enterprise (Kotey and Meredith, 1997). As illustrated in Table 1, empirical studies done in various national, industrial, organizational and entrepreneurial contexts show evidence of diverse entrepreneurial motivations and objectives that the literature tends to regroup into three basic categories, namely personal motivations, organisational motivations, and social and environmental motivations.

Personal Motivations

For the small business owner-manager, creating, acquiring or leading a firm may originate in motivations that are personal in nature. Here, recurring objectives such as insuring one's economic security, autonomy, and style or quality of life have been observed. For instance, Greenbank (2001) found that owner-managers in various in varied sectors such as accounting, construction and printing sought an income that was sufficient to meet family needs. Morris *et al.* (2006) also noted a need for long term financial security for oneself and one's family while LeCornu *et al.* (1996) observed a desire to preserve the family's inheritance. These studies demonstrated that the owner-manager also seeks independence and autonomy, being averse in particular to external financing. In this regard, Walker and Brown's (2004) study done in the professional services sector highlighted the flexibility provided to these individuals by their firm.

Table 1
Classification of Entrepreneurial Motivations

Type of motivation	Entrepreneurial motivation found in the literature	Authors
Personal Motivation	<ul style="list-style-type: none"> ▪ Social recognition ▪ Inheritance ▪ Quality of life ▪ Independence and autonomy 	Cliff (1998) Gray (2002) Greenbank (2001) Kotey and Meredith (1997) LeCornu <i>et al.</i> (1996) Morris <i>et al.</i> (2006) Reijonen and Komppula (2007) Walker and Brown (2004)
Organisational Motivation	<ul style="list-style-type: none"> ▪ Growth rate ▪ Size of the firm ▪ Liquidity (to preserve the firm's autonomy and insure its growth) ▪ Income-generating capacity ▪ Financial health ▪ Satisfaction of customer needs 	Cliff (1998) Getz and Petersen (2005) Greenbank (2001) Gundry and Welsch (2001) Kotey and Meredith (1997) LeCornu <i>et al.</i> (1996) McMahon (2001) Morris <i>et al.</i> (2006) Reijonen and Komppula (2007)
Social and environmental Motivation	<ul style="list-style-type: none"> ▪ Retention of employees ▪ Investment in society ▪ Employees' quality of life ▪ Firm's reputation ▪ Balance between financial health, social involvement and respect of the environment 	Getz and Petersen (2005) Greenbank (2001) Gundry and Welsch (2001) Morris <i>et al.</i> (2006) Székely and Knirsch (2005)

Additional personal motivations observed include the search for a certain lifestyle or quality of life (Gray, 2002; Greenbank, 2001; Reijonen and Komppula, 2007; Walker and Brown, 2004) as well as a form of social recognition (Cliff, 1998). In this regard, Morris *et al.* (2006) note that certain owner-managers have a high need for achievement, a need to meet challenges or a desire to become wealthy. Reijonen and Komppula (2007) observed that the heads of very small enterprises (VSEs) in the tourism and crafts sectors sought to do work that they enjoyed, while Walker and Brown (2004) noted personal satisfaction and pride. Kotey and Meredith (1997) also observed that the heads of small- and medium-sized enterprises (SMEs) in the manufacturing sector sought power, and a sense of competition and creativity.

Organisational Motivations

The head of a small business also manifests entrepreneurial motivations or objectives that are more organisational in nature, that is, that concern the firm itself in that they are associated to its economic and financial well-being. Thus a number of researchers have noted the presence of a growth objective (Getz and Petersen, 2005; Greenbank, 2001), observing in particular that this objective went hand in hand with a desire for personal success (Kotey and Meredith, 1997) or was prioritised differently by the owner-managers (MacMahon, 2001). In this last regard, LeCornu *et al.* (1996) and Cliff (1998) found owner-managers to have a growth objective for their firm only to the extent that this objective did not clash with their personal objectives. Also found empirically are objectives linked to the firm's capacity to generate sufficient income for the owner-manager and for his family, Reijonen and Komppula (2007) noting this for the heads of VSEs in particular. Moreover, objectives related to the growth in the firm's size have been found in particular for the heads of high-growth SMEs ("gazelles") who manifest their intention of one day leading a large enterprise (Gundry and Welsch, 2001).

Achieving profitability and maintaining the firm's financial health are other objectives that owner-managers set for their firm, including profit maximisation (Greenbank, 2001) and sufficient liquidity in order to preserve the firm's financial independence (Gundry and Welsch (2001). These individuals are also motivated by their customers' satisfaction and loyalty (Morris *et al.*, 2006), and by offering products and services that meet high quality standards (Gundry and Welsch, *op. cit.*).

Social and Environmental Motivations

A number of researchers have found that in the pursuit of economic growth and shareholder value objectives, small business owner-managers take social and environmental factors into consideration (Getz and Petersen, 2005; Greenbank, 2001; Gundry and Welsch, 2001; Morris *et al.*, 2006). Maintaining the firm's reputation (Gundry and Welsch, 2001), valuing the personnel's wellbeing and retaining its loyalty, as well as respecting business ethics (Székely and Knirsch, 2005) are added objectives denoted of these individuals. Originating in the context of large enterprises, the notions of corporate social responsibility and sustainable development have now emerged in the small business context. One could surmise that small firms have not had as much opportunity to apply these notions on a regular basis, given their specificities in terms of resources and timeframe (Székely and Knirsch, 2005), and thus further knowledge on this aspect of entrepreneurial motivations is required (Labelle, 2008).

Conceptualizing and Measuring Performance

Defining organisational performance constitutes a complex problem, and a consensus on the definition of organisational performance is yet to be achieved (de La Villarmois, 2001). However, as identified by authors such as Quinn and Rohrbaugh (1983) and Tangen (2004), there are two dominant perspectives, one being objective/economic/rational (productivity, efficiency, profitability, competitiveness, etc.), the other being subjective/political/systemic (coherence, value of human resources, satisfaction of stakeholders, adaptability, etc.) The definition of organisational performance used within the performance measurement literature reflects this diversity in terms of the number of performance dimensions to be covered by performance measurement systems in organisations (Marchand and Raymond, 2008).

With the work of Kaplan and Norton (1992) on organisational performance measurement, emphasis has been put on the firm's strategic objectives. Shortly after, the notion of performance started to be viewed from an enlarged stakeholder perspective. Were taken into account not only the interests and expectancies of owners and shareholders but also of other concerned entities such as customers, employees, suppliers, and government (Bititci, Carrie and McDevitt, 1997). Interest in sustainable development is now observed (e.g. Hubbard, 2009), further extending this stakeholder orientation to society and future generations, even overtaking the focus on strategy (Neely, Adams and Kennerley, 2002). As put forward by Lorino (2001), performance can be defined as a notion relative to the value/cost ratio, where cost is a monetary measure of the resources consumed, and where value is a judgement made by society on the utility of the firm's products/services in response to society's needs.

As reviewed by Marchand and Raymond (2008) the dimensions of performance measured as proposed in the literature were initially mainly financial (profitability, liquidity, and financial health), then more balanced with an operational perspective (e.g. costs, responsiveness, quality, productivity and flexibility). A balanced, holistic, and integrated performance measurement approach should allow for an evaluation of the organisation in its entirety and an integration of all functions/dimensions in balance with the importance given to each, in view of the firm's strategic objectives (Garengo, Biazzo and Bititci, 2005; Neely *et al.*, 2002), including external benchmarks in addition to internal measures (Sinclair and Zairi,

2000). Consequently, a holistic, balanced and integrated performance measurement necessarily relies on various types of indicators, managed in a co-ordinated way.

Performance measurement of an organisation is ideally based on the specific performance logic of that organisation. The firm's performance logic is a notion that refers to the set of cause-effect relationships by which organisational determinants (e.g. management practices) produce certain results in the form of increased or decreased performance (Marchand and Raymond, 2008). Specific to each firm, these causal paths of performance refer to a state of ideal equilibrium that is also specific to each firm (Drucker, 1954; Ridgway, 1956).

Measuring performance in respect of the firm's specific logic of performance provides a holistic and integrated basis for performance management. However, tracing or defining the performance logic of a firm requires an important analytical work that can be consuming in resources and time (Bourne, Neely, Platts and Mills, 2002; Frigo, 2002; Neely, 1999; Neely, Mills, Platts, Richards, Gregory, Bourne and Kennerley, 2000; Neely *et al.*, 2002). To simplify the task of modelling the firm's performance logic, performance measurement frameworks were proposed by a number of researchers, each of these frameworks adopting a specific management perspective, e.g. strategic-based management, as is the case for Kaplan and Norton's (1992, 1996) Balanced Scorecard, and stakeholder-based management, as for Neely *et al.*'s (2002) Performance Prism, probably the two best known frameworks for performance measurement.

Referring to pre-existing performance measurement frameworks (a set of performance indicators with causal links) can have a drawback however, if the intrinsic logic of the model tends to format the specific logic of the organisation into something that is irrelevant or remote to its performance management. Irrelevant information is then provided, incomplete for decision making, unable to allow for a full understanding of the organisation's specific performance logic (e.g. causal links not taken into account by the model) (Bititci, Turner and Begemann, 2000; Bourne *et al.*, 2002; Kueng, Meier and Wettstein, 2001; Miller and Israel, 2002; Neely, Gregory and Platts, 1995; Neely, 1999; Townley and Cooper, 2003).

Historically, enterprise performance has been measured through financial variables or indicators (Neely, 1999; Walker and Brown, 2004), these being judged objective, reliable and easily interpretable for purposes of evaluation and comparative analysis. However the limitations of financial variables as the sole indicators of performance have been noted by many authors, including their short term orientation, their dissociation with the firm's strategy and their incapacity to consider the interests of the various stakeholders in the firm's performance (e.g. Kaplan and Norton, 1992; Lorino, 2001; Neely, 1999). In a context of sustainable development for instance, where taking into account the interests of society in the long term is of strategic importance, measuring performance only with the indicators of the Du Pont Pyramid of Financial Ratios, widely recognised as being the founding model of financial performance measurement (Neely *et al.*, 2000), will not provide the manager with an information that is complete and relevant because its inherent focalisation on shareholders and debt holders' interests, and because of its emphasis on past events (Neely *et al.*, 1995).

Issues with Conceptualizing and Measuring Small Business Performance

Empirical research on performance measurement in SMEs is still rather rare and research needs on this subject have been identified on a recurring basis (Garengo *et al.*, 2005; Hudson, Smart and Bourne, 2001; Marchand and Raymond, 2008). In this regard, an initial study done by Barnes, Coulton, Dickinson, Dransfield, Field, Fisher, Saunders and Shaw (1998) showed that strategic planning is rarely formalised in small firms, that performance measurement is rather unstructured, reactive and spontaneous, and that regular measurement of performance aspects other than financial is rarely practised. Now, an essentially financial measurement of performance implies a management that prioritises profit maximisation and the

pursuit of growth (Walker and Brown, 2004) and financial returns (LeCornu *et al.*, 1996), which is incompatible with the owner-manager's decision-making behaviour. This behaviour is in fact much more one of satisfaction rather than maximisation (e.g. Gray, 2002; Greenbank, 2001). Yet, confronted with global competition, many SMEs require a multidimensional, efficient and effective measurement of their performance (St-Pierre and Raymond, 2004).

Small businesses present a particular problem with regard to performance measurement, that is, with regard to the process of developing performance measurement systems, the characteristics of the performance indicators and the dimensions of performance to be measured (Hudson *et al.*, 2001). The prescribed approaches, developed for large enterprises, are not adapted in practise to the specificities of small businesses, especially of their resource constraints, their strategic flexibility and their need for results in the short term (Kuong, 2000; Sousa, Aspinwall and Rodrigues, 2003). Further knowledge is thus needed on performance measurement models that would be appropriate for SMEs, and on the factors that influence the development of performance measurement systems for these enterprises (Garengo *et al.* (2005).

In light of the empirical studies cited above, one may surmise that the performance of a small business may be conceived differently depending upon the entrepreneurial profile and personal characteristics of its owner-manager. The performance of a small business would thus be intrinsically linked to its capacity to provide its owner-manager with autonomy, independence, financial security, and a style or quality of life to which he or she aspires (Gray, 2002; Greenbank, 2001; Reijonen and Komppula, 2007; Walker and Brown, 2004). It could also be linked to more traditional considerations such as the firm's growth (Getz and Petersen, 2005), customer loyalty (Morris *et al.*, 2006), reputation, quality of products and services offered, and liquidity (Gundry and Welsch, 2001).

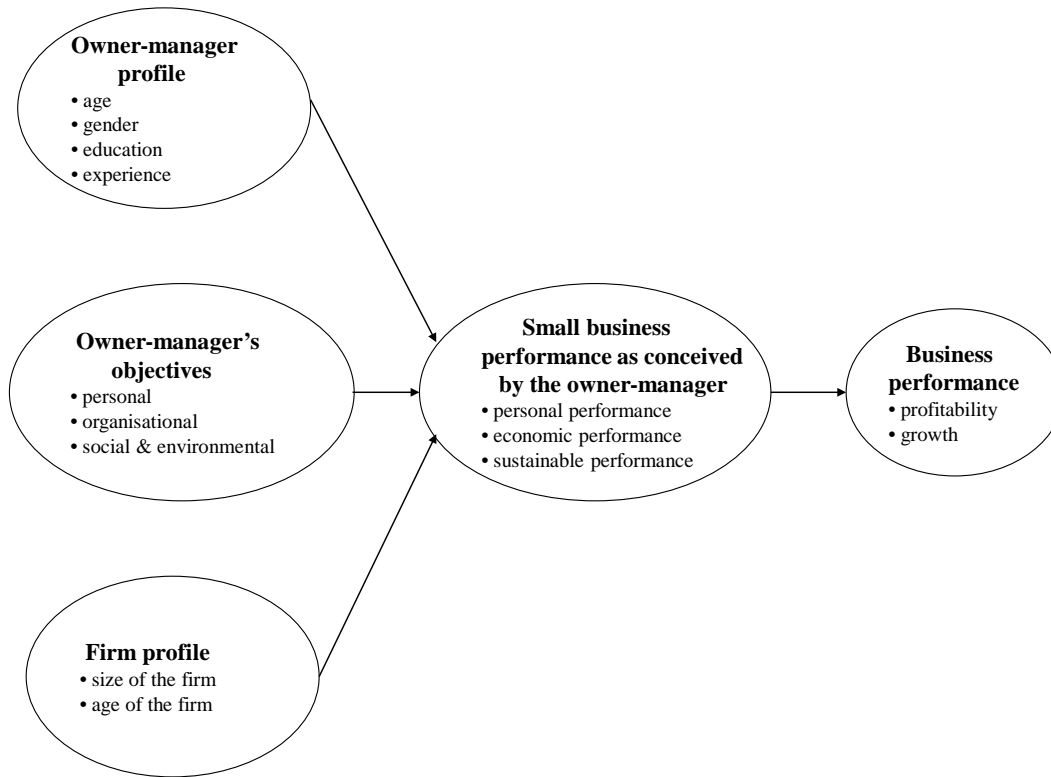
To conclude from a constructionist perspective wherein reality is socially constructed (Weick, 1979), we assume in this study that owner-managers make decisions and manage their firm as governed by the manner in which they conceptualize or "conceive" performance for themselves and their firm (rather than being governed by researchers' and experts' conceptualizations of small business performance), which is in turn governed by their entrepreneurial or strategic intent (i.e. their objectives).

Research Model

The research model developed for this study aims to integrate various elements that are judged within the literature essential to understand the small business owner-manager's behaviour. As shown in Figure 1, the model first includes, as a distinct construct, the owner-manager's objectives as formed by three types of entrepreneurial motivations (personal, organizational, social and environmental). It also includes, as a distinct construct, performance as conceived by the owner-manager, formed by three types of small business performance (personal, economic, sustainable). The first research interest here is in exploring the link between the objectives pursued by the owner-manager and his or her conception of what constitutes small business performance. The second interest lies in exploring to what extent this conception or vision corresponds to the firm's actual "business performance" as traditionally defined in terms of growth and profitability.

To provide added validity to the research model, certain socio-demographic characteristics of the owner-manager that could influence his or her conception of performance such as education (Lee and Tsang, 2001; Smith and Miner, 1983), experience (Getz and Petersen, 2005), age (Reijonen and Komppula, 2007), and gender (Gundry and Welsch, 2001; Morris *et al.*, 2006) were included. Also included was the potential influence of the firm's profile in the form of its size and age.

Figure 1
Research Model of Small Business Performance
from the Owner-manager's Perspective



Method

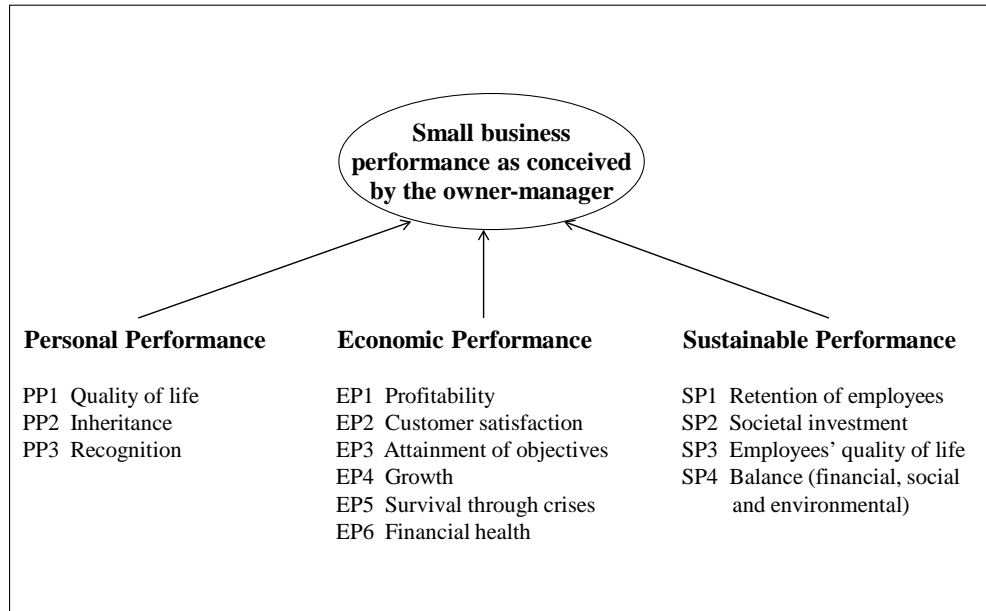
Given past problems of measurement model misspecification in organisational research (MacKenzie, Podsakoff and Jarvis, 2005), three of the four research constructs are modeled as being “formative” rather than “reflective” in light of their composite and multidimensional nature. A formative construct is composed of many indicators that each captures a different aspect; hence changes in these indicators bring or “cause” change in their underlying construct (Diamantopoulos, Riefler and Roth, 2008). In the case of the principal research construct, small business performance as conceived by the owner-manager, it is shown in Figure 2 to be operationalized through three measures, personal performance, economic performance and sustainable performance, each measure capturing a different aspect of the construct and the combination of the three defining the construct (Petter, Straub and Rai, 2007).

Sample

A questionnaire was developed as a Web-survey instrument. After pre-testing the instrument, the owner-managers of 2000 enterprises whose number of employees was inferior to 200, randomly chosen from a repertory of manufacturing firms in the province of Quebec, Canada, were contacted by phone. Of these, 433 accepted the offer to answer the Web-survey, thus giving a 21% response rate. The median number of

employees for the sampled organisations is 11, with a range of 1 to 180; thus, 63% of the firms are VSEs (1-9 employees), 30% are small (SEs, 10 to 49 employees) and 7% are medium-sized (MEs, 50-199 employees). The median age of the firms is 11 years, with a range of 0 to 163. The mean age of the sampled owner-managers is 47 years, with a range of 24 to 75. Among those, 30% are women, 45% have a university education, and 33% have had previous experience as an owner-manager of another firm.

Figure 2
Measurement Model of Small Business Performance from the Owner-manager’s Perspective



Measurement

As argued by researchers such as Chattopadhyay, Glick, Miller and Huber (1999), there exist both practical considerations (e.g., the unavailability or inadequacy of balance sheet data) and a strong theoretical rationale behind the choice of a subjective approach to conceptualizing and measuring small business performance, based on a constructionist perspective in which owner-managers’ perceptions are deemed “more critical to strategy making and firm performance than some "mentally distant" objective indicators” (Spanos and Lioukas, 2001, p. 916). The measures used in this study were thus drawn from the extant literature reviewed above.

Owner-manager’s objectives. The importance of the owner-manager’s objectives was measured by three separate questions. In a manner similar to West and Meyer (1998), respondents were presented with a list of 7 possible personal objectives, 5 possible organisational objectives, and 7 possible social and environmental objectives. The list contained items principally culled from the literature on entrepreneurial motivations (Getz and Petersen, 2005; Greenbank, 2001; Gundry and Welsch, 2001; Morris *et al.*, 2006; Reijonen and Komppula, 2007; Székely and Knirsch, 2006; Walker and Brown, 2004). For each objective, the owner-manager was asked to rate its importance on a 5-point scale (1: not at all important, ..., 5: critically important).

Performance as conceived by the owner-manager. Respondents were presented with a list of 13 statements, each statement presenting a different aspect of what possibly constitutes or typifies the performance of a business firm, including aspects of personal performance (e.g., “a firm that allows its owner-manager to attain the quality of life to which he or she aspires”), economic performance (e.g., “a firm that satisfies its customers’ needs”), and social and environmental performance (e.g., “a firm that invests in society”). These statements were formulated from the preceding literature review. The owner-manager was asked to what extent he or she agreed with each statement (1: totally disagree, ..., 5: totally agree), that is, to what extent each statement could be used to qualify the performance of a firm. The measure is fully presented in Appendix A.

Business performance. As previously noted, an approach based on subjective measures has often been used to relieve the small business performance measurement problem (Sapienza, Smith and Gannon, 1988). Following researchers such as Venkatraman and Ramanujam (1987) and Teoh and Foo (1997) in using such an approach, perceived performance was measured by asking owner-managers to evaluate their firm’s business performance through their perceptions of the firm’s profitability and sales growth relative to the competition for the last two years (1: much below average, ..., 5: much above average).

Results

The inter-correlations of the research variables are presented in Appendix B.

Testing the Measurement Model

Needing to first evaluate the dimensionality of the measures of the owner-managers’ objectives and conception of small business performance, principal component analysis rather than common factor analysis was applied, as the objective of formative constructs is to retain the variance that is unique to each measure and not just the variance that is shared among measures (Petter, Straub and Rai, 2007).

As presented in Table 2, results of analysing the objectives of small business owner-managers indicate that the initial three-dimensional structure proposed from the literature review is inadequate when compared to the five-component structure that emerged, namely personal objectives, economic objectives, social objectives, relational and environmental objectives, and family objectives. One may note here the emergence of a “family” component, distinct from the owner-manager’s personal objectives. One may also note that relating effectively to the firm’s two main stakeholders, that is, its customers and employees, are objectives that are associated to the owner-manager’s ethical and environmental concerns. The combination of these five measures will thus define the small business owner-manager’s objectives as the formative construct later used to test the research model.

With regard to the central research construct, small business performance as conceived by the owner-manager, the initial three-dimensional structure hypothesized from the literature review (cf. Figure 2) was found to be inadequate in light of the results of the principal components analysis presented in Table 3. The fourth dimension that emerged from the analysis, distinct from economic performance, was named “enduring performance” as it relates to the firm’s capacity to stay in business in the long term by weathering economic crises and maintaining its financial health. Note also that one item, “satisfaction of customers’ needs”, theoretically assigned to the “economic performance” component was empirically assigned to the “sustainable performance” component instead, somewhat akin to the previous note regarding the owner-managers’ customer relationship objectives.

Table 2
Principal Component Analysis of Owner-manager's Objectives (n = 433)

item	component	Personal objectives	Economic objectives	Social objectives	Relational & Env. obj.	Family Objectives
Personal objectives						
Be my own boss		.72	- ^a	-	-	-
Make a lot of money		-	.61	-	-	-
Provide income to support my family		.57	-	-	-	-
Achieve better quality of life		.70	-	-	-	-
Be socially involved		-	-	.71	-	-
See my children succeed me		-	-	-	-	.81
Preserve the family inheritance		-	-	-	-	.78
Organisational objectives						
Increase the firm's turnover		-	.72	-	-	-
Realize best profit margins possible		-	.71	-	-	-
Meet customers' expectancies		-	-	-	.61	-
Be a model firm in business		-	.54	-	-	-
Offer interesting and competitive work environment to employees		-	-	-	.65	-
Social and Environmental obj.						
Involve myself in the community		-	-	.87	-	-
Provide jobs in my region		-	-	.47	-	-
Choose env.- responsible suppliers		-	-	-	.52	-
Favour local suppliers		-	-	.47	.47	-
Behave in an ethical manner		-	-	-	.66	-
Favour environmental protection		-	-	-	.63	-
Involve the firm in charitable causes		-	-	.86	-	-

^aA dash indicates a loading inferior to 0.45.

Table 3
Principal Component Analysis of Small Business Performance as Conceived by the Owner-manager (n = 433)

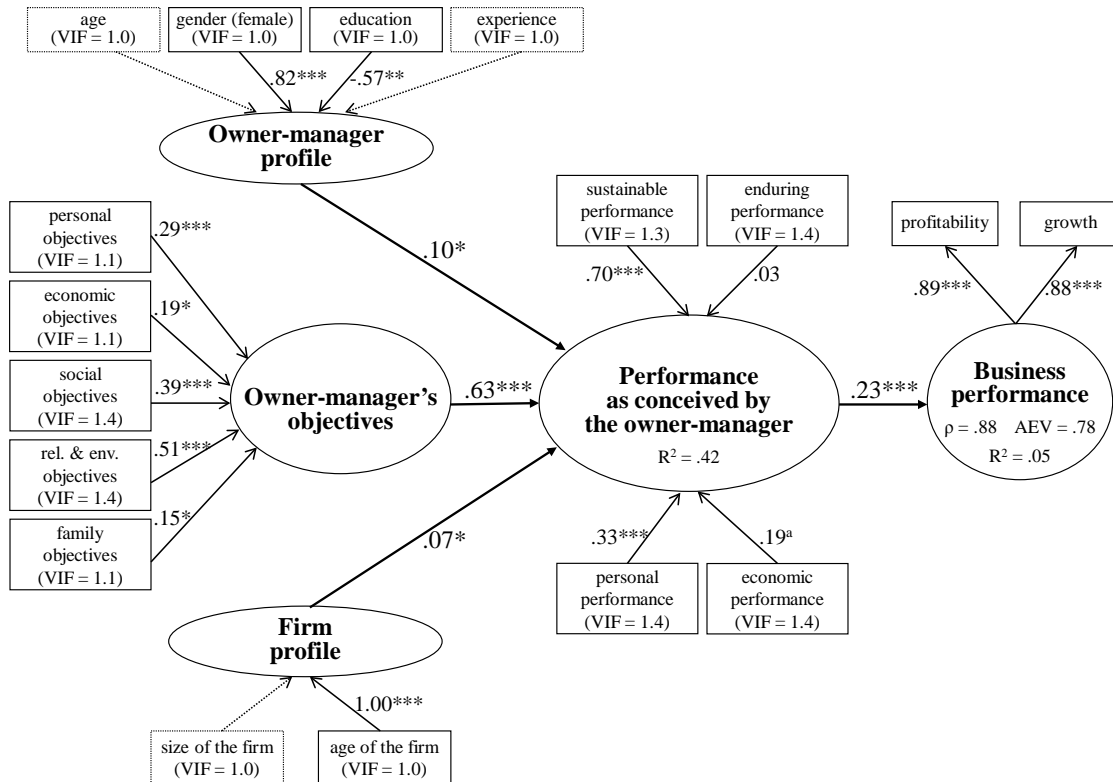
item	component	Sustainable perform.	Personal perform.	Economic perform.	Enduring perform.
Greater profits than comparable firms		- ^a	-	.79	-
Retention of employees		.70	-	-	-
Investment in society		.62	-	-	-
Satisfaction of customers' needs		.63	-	-	-
Attainment of the firm's objectives		-	-	.53	-
Good quality of life provided to employees		.77	-	-	-
Growth of the firm		-	-	.79	-
Survival of the firm through economic crises		-	-	-	.72
Financial health of the firm		-	-	-	.78
Owner-manager's quality of life		-	.65	-	-
Owner-manager's inheritance		-	.67	-	-
Balance (financial, social and environmental)		.58	-	-	-
Owner-manager's recognition in the community		-	.75	-	-

^aA dash indicates a loading inferior to 0.45.

Structural equation modeling (SEM) was used to further validate the measurement model and simultaneously test the research model. To this effect, a components-based SEM technique, PLS (partial least squares) was chosen for its greater capacity to handle formative measurement models in comparison to covariance-based SEM techniques such as Lisrel, EQS and Amos (Robert and Thatcher, 2009).

As previously indicated, the standard reliability and validity criteria applicable to reflective constructs do not apply to formative constructs. In the latter case, one must first verify that there is no multicollinearity among each construct's indicators (Diamantopoulos and Winklhofer, 2001). In order to do so, one uses the variance inflation factor (VIF) statistic, the rule being that the VIF must not be greater than 3.3 in the case of formative constructs (Diamantopoulos and Siguaw, 2006). As can be seen in Figure 3, the VIF value for all of the formative indicators is below this threshold, confirming the absence of any multicollinearity.

Figure 3
Results of testing the research model (PLS, n = 433)



^ap < 0.1 * : p < 0.05 ** : p < 0.01 *** : p < 0.001

Nota. Significance levels were obtained by "bootstrapping".

Indicator validity is confirmed by a weight (γ) that is significant. Three nonsignificant indicators were thus removed from the measurement model, that is, the owner-manager's age and experience in the owner-manager's profile, and for the firm's size in the firm's profile. Another indicator with a nonsignificant weight was not removed however, that is, the "enduring performance" component of small business performance as conceived by the owner-manager ($\gamma = 0.03$, $p > 0.1$). This was following

Cenfetelli and Basselier’s (2009) recommendation to examine the formative indicator’s “loading” (λ), essentially the indicator’s correlation with its construct, so as not to underestimate its contribution to the construct. The strength and significance of its loading ($\lambda = 0.52$, $p < 0.001$) thus justified keeping this last indicator in the measurement model, notwithstanding its nonsignificant weight.

The discriminant validity of each research construct is confirmed by its sharing less than 50% variance with any other construct (all correlations inferior to 0.7, as shown in Table 4), whereas nomological validity is confirmed when the construct’s hypothesized links with other constructs are significantly greater than zero and in the expected direction (Andreev, Heatr, Maoz and Pliskin, 2009). As for the lone reflective construct, perceived performance, its reliability is confirmed by a composite reliability coefficient (ρ) greater than 0.8, its unidimensionality by the three indicator loadings being greater or equal to 0.7, and its convergent validity by an average variance extracted (AVE) greater than 0.5, following the usual criteria in such case (Fornell and Larcker, 1981).

Table 4
Intercorrelation of the Research Constructs

construct	1.	2.	3.	4	5.
1. Owner-manager profile	-				
2. Firm profile	-.10	-			
3. Owner-manager’s objectives	.17	-.03	-		
4. Performance as conceived by the owner-manager	.20	.05	.64	-	
5. Business performance	.02	.07	.21	.23	-

Testing the Research Model

Returning to Figure 3, the research model is tested by assessing the direction, strength and level of significance of the path coefficients (β) estimated by PLS. We focus here on the nomological validity of our re-conceptualization of small business performance as conceived by the owner-manager, by relating this construct with other constructs to which it is assumed to be related either as an antecedent or as a consequence (Jarvis, MacKenzie and Podsakoff, 2003). The ultimate aim of such a re-conceptualization after all is to have the resulting measure function as a predictor or predicted variable.

The first results concern the role of each component in characterizing performance as conceived by the owner-manager. As shown in Table 5, it is the “enduring” component that is deemed by owner-managers, on average, to most characterize small business performance (mean score of 4.4 on a 5-point scale), followed in decreasing order by the “sustainable”, “economic” and “personal” components (with mean scores of 4.2, 3.9 and 3.5 respectively). Note that this hierarchical classification is significant in that all four mean scores differ significantly from each other (as confirmed by paired t-tests). Given the nature of the sample, added validity was provided to this characterization of performance by confirming its stability across two sub-samples based upon the firms’ size, that is, the VSE group (less than 10 employees) and the SME group (10 to 199 employees).

The first antecedent to the owner-managers’ conception of performance was deemed to be their profile in terms of gender and education. This relationship was confirmed empirically as evidenced by a significant, albeit not very strong path coefficient ($\beta = 0.10$, $p < 0.05$). A rather similar result was obtained for the second presumed antecedent, as the firm’s profile, in terms of the firm’s age, was found to be significantly if not very strongly associated to ($\beta = 0.07$, $p < 0.05$).

Table 5
Comparative statistics of the dimensions of performance as perceived by the owner-manager

Performance as conceived by the owner-manager	All enterprises (n = 433)		VSEs (n = 271)	SMEs (n = 162)	t ^a
	mean	s.d.	mean	mean	
personal performance	3.5 ₁	0.9	3.5 ₁	3.6 ₁	0.3
economic performance	3.9 ₂	0.7	3.9 ₂	4.0 ₂	1.2
sustainable performance	4.2 ₃	0.6	4.2 ₃	4.2 ₃	-0.7
enduring performance	4.4 ₄	0.7	4.4 ₄	4.5 ₄	1.7

^at-test to compare means of the two groups (two-tailed, all values nonsignificant, $p > 0.05$)

_{1,2,3,4} Within columns, different subscripts indicate significant difference between means (paired t-test, $p < 0.05$).

As the third presumed antecedent of small business performance as conceived by the owner-manager, the objectives set forth by this individual were confirmed to be highly influential ($\beta = 0.63$, $p < 0.001$). In particular, individuals who accord greater importance to social, relational and environmental objectives will recognize the “sustainable” dimension of performance. And unsurprisingly, those for whom economic objectives are most important will consider performance as being essentially “economic” in nature.

A consequence of the owner-managers’ conception of what constitutes performance was deemed to be their perception of the firm’s actual business performance relative to the competition. Now, a significant path coefficient ($\beta = 0.23$, $p < 0.001$) is found to confirm this relationship. It is worth remembering at this point that for small businesses, perceived business performance has been previously shown to be as valid and accurate measure of organisational performance as “objective” measures based on financial data such as ROA. It would seem nonetheless that a small firm’s competitive performance in terms of profitability and growth will depend in a small part on what its leader actually conceives performance to be, as only 5% of the variance in business performance is explained.

The coefficient of determination (R^2) estimated with PLS was equal to 0.42 for small business performance as conceived by the owner-manager. Added to the significance of the path coefficients, weights and loadings, one may conclude the conceptual model is well fitted to the research issue addressed by this study.

Discussion and Implications

The results show that small business owner-managers conceive of their firm’s performance in a diversified manner that goes much beyond the sole economic performance. One can also observe that economic performance is not what is most prioritized by these individuals. Rather, they conceive *enduring performance* to be most important in evaluating a firm’s performance, probably reflecting the owner-managers’ worries in times of economic upheaval or crisis such as presently exists for most North American and European manufacturing firms in the face of globalisation. This is followed by *sustainable performance*, indicating a predisposition of small business leaders to enlarge the set of stakeholders to be accounted for when making decisions that will affect their firm’s performance, including their employees and their fellow citizens. This constitutes evidence of the small business owner-manager’s permeability to

his or her environment, and could also confirm the need for strategic flexibility when the issue of measuring SMALL BUSINESS performance is raised (Hudson *et al.*, 2001).

The empirical identification of five types of owner-manager objectives confirms the multi-faceted nature of entrepreneurial motivations. The objectives pursued by these individuals are also very predictive of the multidimensional way in which they conceive enterprise performance. Hence, a wide range of objectives translates into a “triple-bottom-line” conception of performance that fits with the emergent notions of corporate social responsibility, “green management” and sustainable development (Lämsiluoto and Järvenpää, 2010) that go beyond the traditional conceptualization of business performance focused on growth and profitability. This last observation is supported moreover by the relatively weak though significant link between the conceived performance and business performance constructs. Performance as conceived by the small business owner-manager thus cannot be confined to indicators of growth and profitability, as he or she would then not have all the information necessary for decision-making. Again, this answers the call to measure the aspects of performance and develop performance indicators that are specific to small business (Hudson *et al.*, 2001; Kueng, 2000; Sousa *et al.*, 2003).

One may note in ending that both the owner-manager’s profile and the firm’s profile were found to have little influence on how he or she conceives performance. These last results do not however eliminate the role that the individual’s gender and education as well as the firm’s age can play in his or her conception of performance, thus requiring further research in this direction (e.g. for gender, see Morris *et al.*, 2006; for education, see Lee and Tsang, 2001). The mediation of other factors such as the owner-manager’s leadership style (Gundry and Welsch, 2001; Morris *et al.*, 2003; Smith and Miner, 1983) or a proactive nature (Kotey and Meredith, 1997; Sadler-Smith *et al.*, 2003) may also come into play.

The re-conceptualization of small business performance from the owner-manager’s perspective as developed and validated in this study has addressed an area of uncertainty and even confusion between researchers and practitioners. A first implication is thus in the reconciliation made between the two with regard to the conceptualization and measure of performance. This reconciliation is necessary for researchers to better understand the managerial behaviour of owner-managers. A second implication lies in identifying the diversity of motivations that determine the owner-managers’ conception of performance, and the importance in particular of environmental and social objectives as opposed to economic objectives. This would explain for instance why a majority of small businesses do not exhibit growth-oriented strategic behaviours. This study has also provided added evidence of the theoretical necessity and utility of adding a “sustainable” dimension to the conceptualization and measurement of small business performance. Future research on the behaviour of small businesses with regard to sustainable development and corporate social responsibility should benefit in this regard (Verbeeten and Boons, 2009). A last contribution to research lies in providing a strong rationale and empirical evidence for re-conceptualizing organisational performance as a formative construct, methodologically-speaking (Petter *et al.*, 2007), and as a consequence of the “strategic intent” of the small business owner-manager, theoretically-speaking (Hamel and Prahalad, 1989).

Subject to further validation, the construct of performance as conceived by the owner-manager may be used as a dependent variable in research on the drivers of entrepreneurial and managerial behaviour. It may also be used as an independent or control variable in small business research on strategic management, performance management, and performance management systems in particular. Applied across the firm’s management team, the re-conceptualization of performance may yield a measure of performance as conceived from a collective or organisational rather than individual perspective. Further research may also yield valuable comparisons of the conceptualization of performance across organisations, industries, cultures, regions, and other groupings.

This study's re-conceptualization of small business performance yields not only valid results but results that may have important meaning for practitioners. For public policy and small business experts, these results confirm that growth and financial performance should not be the only outcomes to strive for in helping small businesses, nor the only criteria with which to evaluate these organisations and their leaders. And greater insight into what constitutes "best practices" for the small business may be gained by recognizing that sustainable development and corporate social responsibility practices aim to improve the "sustainable" and "personal" dimensions of performance from the owner-manager's perspective.

Limitations and Conclusion

The results and implications of this study must be considered in light of the intrinsic limitations of survey research. The nature of the sample, composed in majority of very-small enterprises limits the capacity to generalize research findings across all types of small- and medium-sized enterprises. And while the items measuring the owner-manager's objectives, performance as conceived by the owner-manager and business performance were placed in separate parts of the questionnaire to mitigate autocorrelation effects, other sources of common method variance may yet remain in the survey instrument (Podsakoff, MacKenzie, Lee and Podsakoff, 2003). Finally, the results may be influenced by contextual and industry factors, such as the power of customers, not taken into account in this research.

In pursuing this research, one should identify the strategic means by which small business owner-managers seek to achieve performance as they conceived it to be. For instance, from a market-based view, are firms any more innovative and internationalized when led by an individual who conceives performance as being essentially "economic"? Conversely, are firms any less productive or profitable when led by one who conceives performance in a more "personal" way? And from a resource-based view, to what extent is the development of organisational capabilities, that is, product, market and human resources development capabilities, influenced by the owner-manager's objectives and conception of performance? Answering such questions should provide new challenges for researchers but should also be of importance for public policy and practitioners to provide better targeted and more relevant advice and support to small business managers and entrepreneurs.

References

- Andreev, P., Heatr, T., Maoz, H. and Pliskin, N. (2009), Validating formative partial least squares (PLS) models: Methodological review and empirical illustration, *Proceedings of the Thirtieth International Conference on Information Systems*, Phoenix, Arizona.
- Barnes, M., Coulton, L., Dickinson, T., Dransfield, S., Field, J., Fisher, N., Saunders, I. and Shaw, D. (1998), A new approach to performance measurement for small and medium enterprises, *In Proceedings of the International Conference on Performance Measurement*, Cambridge, 15-17 juillet 1998.
- Bititci, U. S., Carrie, A. S. and McDevitt, L. (1997), Integrated performance measurement systems: A development guide, *International Journal of Operations & Production Management*, 17 (5), 522-534.
- Bititci, U. S., Turner, T. and Begemann, C. (2000), Dynamics of performance measurement systems, *International Journal of Operations & Production Management*, 20 (6), 692-704.
- Blackman, T. (2001), Complexity theory and the new public management, available at <http://www.whb.co.uk/socialissues/tb.htm>.
- Bourne, M., Neely, A., Platts, K. and Mills, J. (2002), The success and failure of performance measurement initiatives : prescriptions of participating managers, *International Journal of Operations and Production Management*, 22 (11), 1288-1310.

- Busi, M. and Bititci, U.S. (2006), Collaborative performance management: present gaps and future research, *International Journal of Productivity and Performance Management*, 55 (1), 7-25.
- Cassar, G. (2007), Money, money, money? A longitudinal investigation of entrepreneur career reasons, growth preferences and achieved growth, *Entrepreneurship & Regional Development*, 19, 89-107.
- Cenfetelli, R.T. and Basselier, G. (2009), Interpretation of formative measurement in information system research, *MIS Quarterly*, 33, 689-707.
- Chattopadhyay, P., Glick, W., Miller, C.C. and Huber, G. (1999), Determinants of executive beliefs: comparing functional conditioning and social influence, *Strategic Management Journal*, 20 (8), 763-789.
- Cliff, J.-E. (1998), Does one size fit all? Exploring the relationship between attitudes towards growth, gender and business size, *Journal of Business Venturing*, 13 (5), 523-542.
- De La Villarmois, O. (2001), Le concept de performance et sa mesure, un état de l'art, *Les Cahiers de la Recherche*, avril, Centre lillois d'analyse et de recherche sur l'évolution des entreprises, Université des sciences et technologies de Lille.
- Diamantopoulos, A. and Siguaw, J (2006), Formative vs. reflective indicators in organizational measure development: a comparison and empirical illustration, *British Journal of Management*, 17, 263-282.
- Diamantopoulos, A. and Winklhofer, H.M. (2001), Index construction with formative indicators: An alternative to scale development, *Journal of Marketing Research*, 38, 269-277.
- Diamantopoulos, A., Riefler, P. and Roth, K.P. (2008), Advancing formative measurement models, *Journal of Business Research*, 61, 1203-1218.
- Drucker, P. F. (1954), *The practice of management*, New York: Harper & Row.
- Fornell, C. and Larcker, D.F. (1981), Evaluating structural equation models with unobservable variables and measurement error, *Journal of Marketing Research*, 18, 39-50.
- Friego, M.L. (2002), Nonfinancial performance measures and strategy execution, *Strategic Management*. August, 6-9.
- Garengo, P., Biazzo, S. and Bititci, U. S. (2005), Performance measurement systems in SMEs: A review for a research agenda, *International Journal of Management Reviews*, 7 (1), 25-47.
- Getz, D. and Petersen, T (2005), Growth and profit-oriented entrepreneurship among family business owners in the tourism and hospitality industry, *International Journal of Hospitality Management*, 24, 219-242.
- Gray, C. (2002), Entrepreneurship, resistance to change and growth in small firms, *Journal of Small Business and Enterprise Development*, 9 (1), 61-72.
- Greenbank, P. (2001), Objective setting in the micro-business, *International Journal of Entrepreneurial Behavior & Research*, 7 (3), 108-127.
- Gundry, L.K. and Welsch, H.P. (2001), The ambitious entrepreneur: High growth strategies of women-owned enterprises, *Journal of Business Venturing*, 16, 453-470.
- Hamel, G. and Prahalad, C.K. (1989), Strategic intent, *Harvard Business Review*, 67(3), 63-76.
- Hubbard, G. (2009), Measuring organizational performance: Beyond the triple bottom line, *Business Strategy and the Environment*, 18 (3), 177-191.
- Hudson, M., Smart, A. and Bourne, M. (2001), Theory and practice in SME performance measurement systems, *International Journal of Operations & Production Management*, 21 (8), 1096-1115.
- Ice, J.W. (2007), Strategic intent: A key to business strategy development and culture change, *Organizational Development Journal*, 25 (4), 169-175.
- Jarvis, R., Curan, J., Kitching, J. and Lightfoot, G. (2000), The use of quantitative and qualitative criteria in the measurement of performance in small firms, *Journal of Small Business and Enterprise Development*, 7 (2), 123-134.
- Jarvis, C.B., MacKenzie, S.B. and Podsakoff, P.M. (2003), A critical review of construct indicators and measurement model misspecification in marketing and consumer research, *Journal of Consumer Research*, 30, 199-216.
- Julien, P.-A., Raymond, L., Abdul-Nour, G. and Jacob, R. (2004), The network enterprise: Ten years of experience at the Bombardier Chair, 1993-2003, in *Annual Review of Progress in Entrepreneurship*

- Research: Volume 2, 2002-2003*, D. Watkins (Ed.), Brussels: European Foundation for Management Development, 278-298.
- Kaplan, R. S. and Norton, D. P. (1992), The balanced scorecard – Measures that drive performance, *Harvard Business Review*, January-February, 71-79.
- Kaplan, R.S. and Norton, D.P. (1996), Using the balanced scorecard as a strategic management system, *Harvard Business Review*, 74 (1), 75-85.
- Kotey, B. and Meredith, G.G. (1997), Relationships among owner/manager personal values, business strategies, and enterprise performance, *Journal of Small Business Management*, 35 (2), 37-61.
- Kueng, P. (2000), Process performance measurement system: A tool to support process-based organizations, *Total Quality Management*, 11 (1), 67-86.
- Kueng, P., Meier, A. and Wettstein, T. (2001), Performance measurement systems must be engineered, *Communications of the Association for Information Systems*, 7, article 3, 1-27.
- Labelle, F. (2008), La PME et la durabilité : une gestion qui améliore les capacités d'innovation des entrepreneurs, *Actes du 9^{ième} Congrès international francophone en entrepreneuriat et PME*, Louvain-la-Neuve, Belgium.
- Lämsiluoto, A. and Järvenpää, M. (2010), Greening the balanced scorecard, *Business Horizons*, 53, 385-395.
- LeCornu, M.R., McMahon, R.G.P., Forsaith, D.M. and Stanger, A.M.J. (1996), The small enterprise financial objective function, *Journal of Small Business Management*, 34 (3), 1-14.
- Lorino, P. (2001), *Méthodes et pratiques de la performance. Le pilotage par les processus et les compétences* (2nd Ed.), Paris : Éditions d'Organisation.
- MacKenzie, S.B., Podsakoff, P.M. and Jarvis, C.B. (2005), The problem of measurement model misspecification in behavioral and organizational research and some recommended solutions, *Journal of Applied Psychology*, 90 (4), 710-730.
- Marchand, M. and Raymond, L. (2008), Researching performance measurement systems: An information systems perspective, *International Journal of Operations & Production Management*, 28 (7), 663-686.
- McMahon, R. G. P. (2001), Deriving an empirical development taxonomy for manufacturing SMEs using data from Australia's business longitudinal survey, *Small Business Economics*, 17 (3), 197-212.
- Miller, J. and Israel, E. (2002), Improving corporate performance measures to drive results, *Financial Executive*, July-August, 51-52.
- Morris, M.H., Miyasaki, N.N., Watters, C.E. and Coombes, S.M. (2006), The dilemma of growth: understanding venture size choices of women entrepreneurs, *Journal of Small Business Management*, 44 (2), 221-244.
- Neely, A. (1999), The performance measurement revolution: why now et what next?, *International Journal of Operations and Production Management*, 19 (2), 205-228.
- Neely, A., Adams, C. and Kennerley, M. (2002), *The Performance Prism: The scorecard for measuring and managing business success*, London: Financial Times Prentice Hall.
- Neely, A., Gregory, M. and Platts, K. (1995), Performance measurement system design: A literature review and research agenda, *International Journal of Operations & Production Management*, 15,(4), 80-116.
- Neely, A., Mills, J., Platts, K., Richards, H., Gregory, M., Bourne, M. and Kennerley, M. (2000), Performance measurement system design: developing and testing a process-based approach, *International Journal of Operations & Production Management*, 20 (10), 692-704.
- Palmer, E. and Parker, D. (2001), Understanding performance measurement systems using physical science uncertainty principles, *International Journal of Operations & Production Management*, 21 (7), 981-999.
- Petter, S., Straub, D. and Rai, A. (2007), Specifying formative constructs in information systems research, *MIS Quarterly*, 31 (4), 623-656.
- 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.

- Quinn, R.E. and Rohrbaugh, J. (1983), A spatial model of effectiveness criteria, *Management Science*, 29 (3), 363-377.
- Raymond, L., St-Pierre, J. and Marchand, M. (2009), A taxonomic approach to studying the performance of manufacturing SMEs, *International Journal of Business Performance Management*, 11 (4), 277-291.
- Reijonen, H. and Komppula, R. (2007), Perception of success and its effect on small firm performance, *Journal of Small Business and Enterprise Development*, 14 (4), 689-701.
- Ridgway, V. F. (1956), Dysfunctional consequences of performance measurement, *Administrative Science Quarterly*, 1 (2), 240-247.
- Roberts, N. and Thatcher, J.B. (2009), Conceptualizing and testing formative constructs: Tutorial and annotated example, *The DATABASE for Advances in Information Systems*, 40 (3), 9-39.
- Sadler-Smith, E. Hampson, Y., Chaston, I and Badger, B. (2003), Managerial behaviour; Entrepreneurial style, and small firm performance, *Journal of Small Business Management*, 41 (1), 47-67
- Sapienza, H.J., Smith, K.G. and Gannon, M.J. (1988), Using subjective evaluations of organizational performance in small business research, *American Journal of Small Business*, 12 (3), 45-53.
- Sinclair, D. and Zairi, M. (2000), Performance measurement: A critical analysis of the literature with respect of total quality management, *International Journal of Management Reviews*, 2 (2), 145-168.
- Sousa, S.D., Aspinwall, E.M. and Rodrigues, A.G. (2003), Performance measures in English small and medium enterprises : survey results, *Business Excellence I : Performance Measures, Benchmarking and Best Practices in New Economy*, University of Minho, Braga, Portugal, 280-286.
- Spanos, Y.E. and Lioukas, S. (2001), An examination into the causal logic of rent generation: contrasting Porter's competitive strategy framework and the resource-based perspective, *Strategic Management Journal*, 22 (10), 907-934.
- St-Pierre, J. and Raymond, L. (2004), Short-term effects of benchmarking on the manufacturing practices and performance of SMEs, *International Journal of Productivity and Performance Management*, 53 (8), 681-699.
- Székely, F. and Knirsch, M. (2006), Responsible leadership and corporate social responsibility: metrics for sustainable performance, *European Management Journal*, 23 (6), 628-647.
- Tangen, S. (2004), Performance measurement: from philosophy to practice, *International Journal of Productivity and Performance Management*, 53 (8), 726-737.
- Townley, B., Cooper, D.J. and Oakes, L. (2003), Performance measures and the rationalization of organizations, *Organizations Studies*, 24 (7), 1045-1071.
- Teoh, H.Y. and Foo, S.L. (1997), Moderating effects of tolerance for ambiguity and risk-taking propensity on the role conflict perceived performance relationship: Evidence from Singaporean entrepreneurs, *Journal of Business Venturing*, 12 (1), 67-81.
- Venkatraman, N. and Ramanujam, V. (1987), Measurement of business economic performance: An examination of method convergence, *Journal of Management*, 13 (1), 109-122.
- Verbeeten, F.H.M. and Boons, A.N.A.M. (2009), Strategic priorities, performance measures, and performance: An empirical analysis in Dutch firms, *European Management Journal*, 27 (2), 113-128.
- Vicenzi, R. and Adkins, G. (2000), A tool for assessing organizational vitality in an era of complexity, *Technological Forecasting and Social Change*, 64, 101-113.
- Walker, E. and Brown, A. (2004), What success factors are important to small business owners? *International Small Business Journal*, 22 (6), 577-594.
- Weick, K. (1979), *The Social Psychology of Organizing*, Addison-Wesley, Reading, Massachusetts.
- West, G.P. III and Meyer, G.D. (1998), To agree or not to agree? Consensus and performance in new ventures, *Journal of Business Venturing*, 13 (5), 395-422.

Appendix A: Scales used to measure performance as conceived by the owner-manager

In your opinion and considering your own firm’s experience, please indicate to what extent each of the following statements can be used to qualify the **performance** of a firm.

	Totally disagree				Totally agree
a. A firm that is more profitable than comparable firms.	1	2	3	4	5
b. A firm that can retain its employees	1	2	3	4	5
c. A firm that invests in society.	1	2	3	4	5
d. A firm that satisfies its customers’ needs.	1	2	3	4	5
e. A firm that attains its objectives.	1	2	3	4	5
f. A firm that insures a good quality of life for its employees.	1	2	3	4	5
g. A firm that grows (turnover and size).	1	2	3	4	5
h. A firm that survives through economic crises.	1	2	3	4	5
i. A firm that is in good financial health.	1	2	3	4	5
j. A firm that allows its owner-manager to attain the quality of life to which he or she aspires.	1	2	3	4	5
k. A firm that insures a significant inheritance to its owner-manager.	1	2	3	4	5
l. A firm that achieves a balance between its financial health, its social involvement and its respect for the environment	1	2	3	4	5
m. A firm that allows its owner-manager to achieve recognition within his or her community.	1	2	3	4	5

Appendix B: Intercorrelation of the research variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.
Owner-manager's Objectives																
1. personal objectives	-															
2. economic objectives	.18	-														
3. social objectives	.13	.14	-													
4. rel. & env. objectives	.24	.17	.50	-												
5. family objectives	.20	.23	.17	.10	-											
Performance as Conceived																
6. personal performance	.30	.25	.30	.28	.34	-										
7. economic performance	.22	.43	.15	.26	.17	.43	-									
8. sustainable performance	.27	.14	.49	.54	.13	.41	.35	-								
9. enduring performance	.27	.19	.13	.27	.15	.41	.43	.39	-							
Business Performance																
10. profitability	.09	.00	.13	.17	.05	.16	.18	.16	.17	-						
11. growth	.07	.09	.11	.18	.08	.14	.15	.16	.12	.57	-					
Owner-manager Profile																
12. age	-.09	-.02	-.03	-.02	-.03	.01	-.07	.03	.01	-.01	-.11	-				
13. gender	.13	.10	.02	.17	-.08	.05	.12	.18	.07	.04	.07	-.14	-			
14. education	-.08	.05	-.05	-.08	-.17	-.15	-.05	-.08	-.07	.04	.05	.01	-.00	-		
15. experience	-.01	.08	.07	.00	.04	-.03	-.00	.01	-.02	.00	-.00	.11	-.13	.01	-	
Firm Profile																
16. size of the firm	-.15	.13	.04	.03	.00	.03	.08	-.02	.07	.09	.09	.07	-.14	.09	.07	-
17. age of the firm	-.07	-.05	.05	-.06	.09	.08	-.02	.03	-.02	.11	.02	.20	-.13	-.01	-.13	.14

Nota. Correlations greater than 0.09 or smaller than -.09 are significant (two-tailed, $p < 0.05$).