



International strategy and performance—Clustering strategic types of SMEs

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ABSTRACT

This paper identifies different strategic types of internationalised SMEs, in so doing providing managers and entrepreneurs with a much better understanding of the main strategic options and their relationship with the international performance of firms. We provide a theoretical analysis of strategic orientations and strategic behaviour in international SMEs, followed by an empirical investigation based on a sample of Italian SMEs. The SMEs are grouped into strategic types using cluster analysis, and the link between strategic type and international performance is subsequently analysed using logistic regression. The empirical data suggest that there are four broad strategic types, namely an entrepreneurial/growth-oriented group of firms, a customer-oriented group, a product/inward-oriented cluster, and a further group of firms that lacks strategic orientation. The characteristics of the strategic clusters are discussed, and the regression results show that a clear and proactive strategic orientation and its consistency with business strategy leads to improved international performance. This confirms the positive and highly significant role of strategic types.

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1. Introduction

The relationship between differentiated strategic orientations, related strategic behaviours and the subsequent international performance of firms is a relevant issue for entrepreneurs, managers and policy-makers. This topic has been neglected in international business research. Research into possible alternative strategic typologies is scattered and the same holds for the link between strategic orientation, internationalisation and the overall performance of the firm. The research gap regarding the association between strategy and internationalisation has been highlighted in two reviews. Melin (1992) not only emphasizes the missing link between internationalisation and strategy, but he also highlights the deterministic and static nature of most contributions. Ricart, Enright, Ghemawat, Hart, and Khanna (2004), referring to the 84 papers published in the *Journal of International Business Studies* between 1970 and 2003, identify only eleven papers that in some way dealt with overall strategic issues. Additionally, in most of the reviewed contributions, the large multinational corporation (MNC) is the centre of attention, while the international strategy of small and medium-sized enterprises (SMEs) remains a largely neglected research field (Bell, Crick, & Young, 2004).

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The lack of research into SME business-level strategising might be partially explained by the fact that SME behaviour has been described as essentially unplanned and reactive (Bilkey & Tesar, 1977) or at best opportunistic (Westhead, Wright, & Ucbasaran, 2002). However, Bell et al. (2004) note that “the absence of an explicit and formal strategy does not equate to the lack of strategic vision, whether or not this involves a global focus.” In the same vein, Welch and Welch (1996) emphasize the “strategic foundations” of the firm (including knowledge, skills and experience, etc.) and, similarly to Crick and Spence (2005), identify planned and unplanned routes to internationalisation. The international entrepreneurship literature also highlights the proactive, innovative and risk-taking attitude of entrepreneurial (small) firms towards foreign market opportunities, providing empirical evidence of their ability to create and implement internationally oriented strategic choices. Although the change in SME internationalisation behaviour has been widely recognized at both the academic and the political level, analysis of the *differentiated* strategic orientations of SMEs in international markets is missing. Our contribution addresses this issue. The empirical analysis aims at uncovering strategic types in the internationally oriented SME universe and at determining whether these particular strategic postures result in international performance differentials.

The paper is structured as follows. Firstly, a literature review of the extant research is provided on key dimensions of the strategy construct, in particular the strategic orientation dimension and its links with competitive and functional strategies. Secondly, the evidence regarding the impact of strategic orientation/strategic types on performance is reviewed. The research methodology is then presented and the main findings are discussed. The paper ends with a discussion of the implications of the study for practitioners and researchers, its limitations and the identification of future research opportunities.

2. Strategic orientation constructs

This paper puts forward the idea that strategic orientations in SMEs are differentiated and give rise to correspondingly differentiated strategic behaviours, thus determining differentiated internationalisation performances. No definitive view on the ontology and conceptualisation of strategic orientation constructs has been agreed upon despite much research into strategic orientations (SOs) – understood as the critical means for firms to survive and prosper in a competitive environment. SO studies emerge from distinct research streams, namely strategic management, strategic marketing, and (international) entrepreneurship.

One of the main contributions about differentiated SOs is provided by Miles and Snow (1978), who outline four strategic typologies: reactors, defenders, analyzers, and prospectors. This classification is based on the relationship between firms and their environment, and accommodates differentiated levels of strategic proactiveness. From this viewpoint, a link between strategic management and entrepreneurship is put forward. Defenders adopt a conservative view of strategy. Prospectors, in contrast, emphasize innovation and change and strive to compete mainly by exploring new market opportunities, emerging trends and technology. Defenders and prospectors thus constitute the two poles in a continuum of strategic proactiveness. Analyzers, being a combination of prospector and defender orientation, fall in the middle of this continuum. Reactors lack a consistent strategy.

The construct of *entrepreneurial orientation* (EO) has been developed in the entrepreneurship literature, and can be described as a combination of three dimensions, namely innovativeness, proactiveness, and risk-taking (Lumpkin & Dess, 1996). This literature stream has mostly considered firms with this strategic orientation as opposed to “non-entrepreneurial” firms.

In a similar vein, innovation management studies identify an *innovation (sometimes labelled technology) orientation* (IO) which is present when organizations implement new ideas, products or processes (Hult, Hurley, & Knight, 2004; Hurley & Hult, 1998). It is associated with investments in technological leadership and with high-quality products (Fritz, 1996; Gatignon & Xuereb, 1997) and – as with the above-mentioned entrepreneurial orientation – is a construct which identifies a certain group of firms as opposed to all the remaining ones.

Apart from the Miles and Snow contribution, much of the work about differentiated strategic orientations may be found in the marketing literature. In an early work, Keith (1960) describes a firm's evolution from production and sales to marketing orientation. *Production orientation* (PO) is based on the pursuit of production and other operating efficiencies and will produce widely available and relatively inexpensive products and services in order to establish competitive advantage (Fritz, 1996; Kotler, 2002; Noble, Sinha, & Kumar, 2002). A production orientation in terms of delivering reasonable quality at the lowest price has been shown to be highly effective in some contexts (Zhou & Li, 2007). A *selling orientation* (SEO) is characterized by aggressive sales and marketing to achieve fast returns and maximize market share (Noble et al., 2002). Firms pursuing such an orientation aim at market share expansion and short-term sales maximization while contemporaneously investing heavily in promotion and distribution (Zhou & Li, 2007). Kohli and Jaworski (1990) and Narver and Slater (1990) elaborated further the Keith concept of market orientation.³ This construct places the highest

³ The concept can be traced back to the 1950s when Drucker (1954) argued that customers should be the foundation of an organization and the reason for its existence. In developing the market orientation concept, researchers have extended this idea: they suggest that market orientation includes two major sub-dimensions, namely *customer orientation* and *competitor orientation*.

priority on superior customer value creation and delivery that in turn lead to continuous superior performance for the business (Narver & Slater, 1990).

From this review it is possible to make four main observations. The first is that the different constructs related to SO are deeply embedded in the research streams from which they were generated, and that there is partial overlap between constructs (with different labels) belonging to different disciplines. The different constructs of strategic orientation clearly have some common traits, and the distinctions between them are not always clear-cut. Recent research has attempted to highlight the complementary approaches, but has yet to draw out fully the synergetic effects of the constructs (Baker & Sinkula, 2009; Escriba-Esteve, Sanchez-Peinado, & Sanchez-Peinado, 2008; Escriba-Esteve, Sanchez-Peinado, & Sanchez-Peinado, 2009; Han, Kim, & Srivastava, 1998). The second is that these constructs are frequently anecdotally reported, perhaps because they are the result of a fragmented body of literature. Third, many of these constructs are dichotomous, in that firms either have a given orientation or not. In reality, however, firms may adopt a variety of strategic orientations. A final observation is that little attention has been given either to small businesses or to the international strategic orientation of firms.

3. The link between strategic orientation, strategic behaviour and (international) performance

Examining only the construct of strategic orientation provides an incomplete understanding of SME performance. While it is agreed that strategic orientation is linked to competitive advantage, little is known about how the asset is deployed to achieve performance (Morgan, Vorhies, & Mason, 2009). The connecting role of SOs has also failed to receive the attention it deserves (Tuppura, Saarenketo, Puumalainen, Jantunen, & Kylaheiko, 2008). From a resource-based view, a SO leads to the distinctive competencies that enable innovation, efficiency, quality and customer responsiveness, each of which can be leveraged to create a cost or differentiation advantage. Thus we work on the assumption that strategic orientations influence organizational behaviour which in turn might become manifest in strategies leading to competitive advantage that ultimately influences performance.

Different SOs imply that firms anticipate and react to internal and external factors in various ways and that this affects their opportunity exploration and exploitation processes. For example, a differentiation strategy that requires an excellent understanding of customer needs and competitor positioning in order to achieve differentiation advantages suggests a customer and competitor orientation as well as an innovation orientation. Homburg, Krohmer, and Workman (2004), in line with Narver and Slater (1990), identify a link between market orientation and differentiation for large companies, and Pelham and Wilson (1996) add supporting evidence in the SME context. The focus strategy is also likely to be associated with customer orientation and thus firms must understand the needs of their target customers thoroughly. Cost-leadership strategies aiming to achieve cost-advantages have generally been related to more defensive and conservative orientations (Miles & Snow, 1978; Porter, 1980) and may also be related to production orientation.

As regards functional strategies, prospectors/entrepreneurial/market-oriented companies have been described as putting heavy emphasis on new product/service development. They generally advertise and promote their output, and are able to charge above-average prices, showing a superior growth orientation (Buzzel & Gale, 1987; Gale & Swire, 1977; Hambrick, 1983; McKee, Varadarajan, & Pride, 1989; Miles & Snow, 1978; Miles & Snow, 1986). On the contrary, product-oriented businesses, defenders or internally oriented businesses could be best described as valuing process R&D, directing their attention towards reducing manufacturing and distribution costs and seeking high-capacity utilization. They tend to emphasize their product on either a price or quality basis and place little value in customer orientation (Dess & Davis, 1984; Miles & Snow, 1986; Porter, 1980; Wright, Kroll, Pray, & Lado, 1995). Different strategic orientations can thus be expected to vary in how they value different competitive and functional strategies and to be facilitated by their different competitive advantages.

Do strategic orientations/strategic types influence performance? The answer seems to be “yes” based on the theoretical conceptualisations and empirical findings in the various research streams. There also seems to be a common understanding that no single strategic orientation leads to superior performance in all situations (Miles & Snow, 1978; Noble et al., 2002). However, there is a lack of studies that link SO/strategic types and performance in an international context and this holds particularly for findings related to SMEs (Balabanis & Katsikeas, 2003; Caruana, Morris, & Vella, 1998).

The positive relationship between market orientation and business performance has been confirmed by meta-analyses (e.g. Kirca, Jaycachandran, & Bearden, 2005). Only recently has there been some research into market orientation in the international context (e.g. Armario, Ruiz, & Armario, 2008; Cadogan, Cui, & Li, 2003; Kirca, Cavusgil, & Hult, 2009; Kwon & Hu, 2000; Rose & Shoham, 2002) showing mixed results.

Entrepreneurial orientation has been described as an antecedent to growth and performance differences in firms in both domestic and foreign markets (e.g. Kuivalainen, Sundqvist, & Servais, 2007; Robertson & Chetty, 2000; Wiklund, 1999; Zahra & Covin, 1995; Zahra, 1991). Cooper (1979) and Cahill (1996) report that an entrepreneurial posture can result in early entry or pioneer advantages in new markets, which in turn may lead to superior performance. In general, export performance research underlines the positive impact of a proactive posture and management support and commitment on export performance (e.g. Madsen, 1989).

Research regarding innovation orientation, measured by innovation success, shows a generally positive relationship with business performance and profitability (Gatignon & Xuereb, 1997; Han et al., 1998) in the SME field.

Mixed results have been obtained in empirical studies related to the Miles and Snow strategic typology. The findings range from insignificant results, leading to the assumption of equi-finality (Miles & Snow, 1978), to significant but weak relationships in the Conant, Mokwa, and Varadarajan (1990) study. Woodside, Sullivan, and Trappey (1999) found a strong two-step relationship when linking strategic types to organizational performance via distinctive marketing competencies.

The mixed research findings in this field of investigation have been attributed to the varying operationalization of constructs and dimensions, but also to the fact that relationships are complex and that single and direct relationships might not be adequate in order to model them correctly (Baker & Sinkula, 2009; Lumpkin & Dess, 1996). An approach that is able to investigate synergies and complementary mechanisms among the various aspects outlined above might give some further insight into SMEs' ways of strategising. We thus decided to follow a holistic approach and to integrate strategic orientations, competitive and functional strategic decisions and competitive advantage simultaneously into our research. These three dimensions link to potentially distinct strategic types that are in turn hypothesized to impact differently on internationalisation performance.

4. Data and methodology

SMEs are the backbone of the Italian economy, as is the case in most European economies. In the Italian case, SMEs account for about 99% of the total number of Italian enterprises (ISTAT, 2010). Within the manufacturing sector, SMEs account for approximately one fifth of exports (a share that is in line with the average reported for OECD countries), and these exporting businesses account for more than two-thirds of value creation and 55% of employment. In addition, exporting firms report double the investment per employee of non-exporting firms, thus suggesting a disproportionate contribution to innovation and future growth in the Italian economy (ISTAT, 2007).

4.1. Data

The research has been carried out on data gathered through structured questionnaires with closed questions developed by a cross-European research team.⁴ The questionnaire was pre-tested locally in order to enhance understanding and the response rate.

A representative sample of 850 firms was drawn from the Union of Italian Chambers of Commerce database and a questionnaire was mailed to the CEO or the most knowledgeable person regarding international activities. The response rate of 17% can be considered acceptable (Harzing, 2000a) but also comparable to other similar investigations (Frambach, Prabhu, & Verhallen, 2003; Gatignon & Xuereb, 1997). No significant differences were found between respondents and non-respondents based on criteria including the size and international activities of the firms. The 148 respondent firms may thus be considered as representative of the population of small and medium sized manufacturing enterprises.

The questionnaire consisted of 72 items – Table 1 summarizes the dimensions suggested by the literature, while Table A1 provides a full list of the items. Five-point Likert scales (anchored with 1 = not important/very low-poor or 5 = very important/very high-good) were used to measure the various dimensions of strategic orientations, competitive/functional strategy, competitive advantage, and international performance.

The questions related to internationalisation motives (variables 1–14) and to management characteristics and attitudes (variables 56–72) were used to describe proactiveness/reactiveness and risk-taking, and were based on the sets of variables developed by Wood and Robertson (1997), Knight (1997), and Moen (1999). The questions related to strategic orientation differentiated between entrepreneurial, innovation, production, sales and market orientation, and correspond to the critical drivers as delineated by the literature. These constructs were assessed with explicit reference to major foreign markets using a set of items (variables 20–40) developed by Knight (1997) and Moen (1999). They were also judged revelatory of the *source of competitive advantage* based on the concept presented by Day and Wensley (1988). Questions measuring *competitive strategy* and *competitive advantage* were labelled (variables 15–19) following Knight (1997). *Functional (marketing) strategy* was established as the degree of standardization/adaptation in major export markets using earlier versions of Lages, Abrantes, and Lages (2008) STRATADAPT scale (variables 41–55). A combination of subjective and objective performance measures better expresses the multidimensional nature of *international performance*, according to Matthyssens and Pauwels (1996) among others. The objective measures used focus on export intensity (the ratio of export sales over total sales in 2005), and its growth (from 2000 to 2005) in order to capture dynamism of performance. Both measures have been widely employed in international business research as indicators of SMEs' international performance. This way of proceeding is consistent with the time frame (2003–2005) of the subjective performance variables employed and expresses the assumption that orientations and strategies were already present and implemented in the period under investigation. The subjective measures capture satisfaction with additional indicators (profit, market share, etc.), which are usually difficult to obtain and compare and seem directly amenable to comparison across firms. Also, subjective and objective measures have proved to be positively and closely related (Shoham, 1998). The used subjective measures are based on a set of twelve items established by Larimo (2007) and Knight (1997) (see Table A2). Respondents were asked to score their satisfaction with these items compared to competition in major international markets.

⁴ Jorma Larimo, University of Vaasa, was the project leader.

Table 1
Measures of strategic orientation, competitive advantage and international performance.

	Constructs	Key dimension	Measures	Sources
Strategic orientation	Entrepreneurial orientation	Proactiveness, innovativeness, risk-taking	Proactive motivations/commitment towards internationalisation, global mindset, importance of growth variables, innovation orientation variables	Wood and Robertson (1997), Knight (1997) and Moen (1999)
	Innovation orientation	Capacity to innovate, innovativeness;	New product/new service development, new processes, high quality products, technological leadership	Hurley and Hult (1998), Hult et al. (2004), Gatignon and Xuereb (1997) and Fritz (1996)
	Market orientation	Customer orientation, Competitor orientation (<i>interfunctional coordination</i>)	Customer satisfaction, customer knowledge, competitor knowledge, high quality products, innovation variables; differentiated product-portfolio; attention towards adaptation following customer orientation	Narver and Slater (1990) and Kohli and Jaworski (1990)
	Product orientation		Production efficiencies/productivity focus, competitive in terms of production process; lead time; emphasis on distribution but little importance of other marketing instruments; reduced innovation ability and customer satisfaction	Noble et al. (2002), Kotler (2002), Keith (1960) and Zhou and Li (2007)
	Sales orientation		Aggressive sales/promotion practice; importance of market share; no attention towards customer satisfaction/knowledge, absence of quality considerations	Noble et al. (2002), Kotler (2002), Keith (1960) and Zhou and Li (2007)
Strategy/competitive advantage	Competitive/functional strategy; competitive advantage	Niche/differentiation strategy; quality/technology-innovation/marketing advantage; standardization/adaptation practice on foreign markets	Serving a specialised need, more adapted than standardized product, small markets but many target markets; higher product quality, techno. uniqueness; dimensions of competitiveness on foreign markets compared to competition; product/price/distribution/communication items	Knight (1997), Moen (1999) and Day and Wensley (1988) and Lages et al. (2008)
International Performance		Objective; subjective	Export intensity; growth of export intensity <i>importance of/satisfaction with</i> profit goals, market share, product performance in major markets, etc.	Moen (1999), Knight (1997) and Larimo (2007)

4.2. Methodology

Cluster analysis, being a structure-discovering analytical method, has been employed in order to detect homogenous strategic groups. It is a commonly used statistical technique in a variety of disciplines when classification of subjects is the objective. Clustering has been used in order to develop taxonomies in strategy research by Zahra and Covin (1993), Slater and Olson (2001), and Kabanoff and Brown (2008) among others. In an international context Morrison and Roth (1992) used the technique to detect business strategies in global industries, and Harzing (2000b) applied it to test empirically and extend the Bartlett & Ghoshal typology of MNCs.

Cluster analysis has played a key role in research because it allows for the inclusion of multiple variables as sources of configuration definition and therefore enables potentially rich descriptions (Ketchen & Shook, 1996). Beyond traditional clustering approaches, many different techniques such as fuzzy cluster (Bezdek, 1981), quality threshold clustering (Heyer, Kruglyak, & Yooséph, 1999) and, most recently, latent cluster (Wedel & Kamakura, 2000) have been proposed and used for segmentation purposes. Despite its strengths, cluster analysis has been criticized for its reliance on researchers' decisions and because the cluster results may not reflect real differences but instead may simply be statistical artefacts (Thomas & Venkatraman, 1998). As with any technique, however, the results obtained are only as good as its implementation and the underlying theoretical rationale. In applying the technique, the recommendations of methodologists (Ketchen & Shook, 1996; Punj & Stewart, 1983) were strictly followed. We applied a two-stage procedure by means of a hierarchical cluster and a k-means cluster (non-hierarchical), the most commonly used cluster protocol. The hierarchical cluster procedure, based on the Euclidean distance and on the Ward method, allows hypotheses about the appropriate number of clusters when no *a priori* information is available. Once the candidate numbers of clusters are determined, the k-means cluster procedure searches for the best configuration of the predefined groups placing similar observations together, forming a cluster.

The second part of the analysis involves a logistic regression, where the dependent variable is the log of the odds of the firms demonstrating high performance. Hence a positive coefficient for an explanatory variable suggests that that variable increases firm performance. We report the Akaike Information Criterion (AIC) as a goodness-of-fit measure. The

Table 2
Strategic type cluster analysis.

Number of clusters	Agglomeration coefficient	Change in agglomeration coefficient
2	1145.13	2109.56
3	410.59	734.54
4	262.28	148.31
5	210.57	51.71
6	175.69	34.88

Bold values refer to selected number of clusters and relative agglomeration coefficients.

misclassification rate, an additional goodness-of-fit indicator, represents the number of observations not correctly classified by the model during the prediction phase (if the model is good, such a rate should be as low as possible).

5. Empirical findings

Two cluster analyses were undertaken: the first analysis was aimed at detecting *homogenous strategic groups of firms*, whereas the second analysis combined multiple international performance measures so as to identify *performance clusters*. The results of the latter cluster analysis were then regressed on the former clustering in order to check for potential strategic type – international performance relationships, allowing a statistically consistent and deeper investigation of this association.

5.1. Strategic types cluster analysis

Four consistent and statistically significant *strategic groups* are identified by evaluating the agglomeration schedule shown in Table 2. The agglomeration coefficient shows a sharp rise between the 4-cluster and the 3-cluster solutions, hence the former is judged to be the ‘best’ solution.

The significance ($F = 32.28, p < 0.01$) of the cluster differences was confirmed by employing a MANOVA scheme used by Morrison and Roth (1992), among others. These four clusters are therefore posited as representing distinct strategic types. Table 3 summarizes the mean performance characteristics of the four clusters.

Having statistically confirmed homogeneity within groups and heterogeneity across groups we now present the profiles and the labels of the identified strategic types. The interpretation of the cluster results follows highest–lowest patterns across clusters, but “high” and “low” within-cluster scores have also been used for strategic type profiles. The mean scores for the firms in each cluster for each of the 72 questionnaire items are reported in Table A1, together with the least significant differences (LSD) that may be used for multiple comparisons tests between the means.

5.1.1. Cluster 1: “Shelter from the storm” (customer-oriented)

The first cluster is the *customer-oriented* group of firms, that follows a *niche strategy* and could be seen as naturally international. The mean scores for selected questionnaire items are shown in Table 4. Customer-orientation is reflected in the highest values in terms of customer satisfaction, and customer and competitor knowledge, whereas the niche is defined by items such as “our product satisfies a particular need”, and “our markets are small but we have many target markets”. The cluster is characterized by the highest export ratio across all four clusters, and is consequently largely dependent on internationalisation. Hand in hand with its strategy goes its considerable number of export markets, still in expansion (see Table 3). This is in line with research findings that describe the combination of customer orientation and niche strategy as a

Table 3
Key performance characteristics of the four clusters.

	Cluster 1	Cluster 2	Cluster 3	Cluster 4
No. of cluster firms %	20	36	29	15
<i>Demographic characteristics</i>				
Age	36 ^b	38	35	33
Family-owned firms %	67	60	53	86
Independent firms %	83	87	81	91
Industry (% of the three main industry sectors; Nace DB, DA, DK)	77	67	70	77
Size (average employee no.)	53	48	58	40
<i>Internationalisation characteristics</i>				
No. of export markets in 2000–2005–expected 2008	17–20–22	7–11–12	20–27–27	11–15–17
Increase in no. of markets % ^a	19–9–31	46–7–56	30–0–30	31–14–50
Average export ratios % ^a	42–53–61	26–27–36	35–49–59	28–33–41
Growth of export ratio ^a	24–16–44	3–31–34	42–19–68	16–25–46

^a The first two numbers refer to the years 2000 and 2005, whereas the third number indicates increase from 2000 up to 2008.

^b After statistical correction for a 203-year old outlier.

Table 4

Selected questionnaire scores for cluster 1 firms.

Questionnaire item	Overall mean	Cluster 1 mean
<i>The cluster mean is high for:</i>		
Customer satisfaction	4.32	4.63
Customer knowledge	3.68	4.17
Competitor knowledge	3.46	3.87
Networking	2.68	3.60
Niche but many target markets	3.36	3.53
Products satisfy a particular need	3.34	3.44
<i>The cluster mean is low for:</i>		
Product design	2.65	2.07
Distribution budget	2.68	1.80
Product packaging	2.60	1.67
Label/brand	2.32	1.60
Promotion budget	2.55	1.73
Promotion targets	2.73	1.73

Note: See Table A1 for the scores for all questionnaire items.

wise move for small firms, and as necessitating and enabling small firm internationalisation in a large number of target markets (Calori, Melin, Atamer, & Gustavsson, 2000; Dalgic & Leeuw, 1994; Zucchella & Palamara, 2007). Also, similar to extant research regarding the niche strategy and related standardization/adaptation practice, the offering of cluster 1 firms is standardized, serving a homogeneous global segment. Neither brand, nor packaging and design, nor communication and distribution are adapted as is underlined by significantly low means across functional strategy items (see LSD values in Table A1).

The firms therefore seem to master the skills and capabilities they need to sustain their competitive advantage. Their drive towards foreign markets is further supported by managerial capabilities relevant to internationalisation: within the cluster, international orientation, experience, mindset and commitment rank highest. As is posited by the strategic management/resource based view, the fit between strategic orientation and capabilities (Day, 1994; Morgan, Zou, Vorhies, & Katsikeas, 2003) leads to competitive advantage. In this group of firms, customer orientation and managerial capabilities, together with the targeting of highly specialized niche markets and a greater propensity to use networks suggest that these firms have a superior fit between capabilities and strategy than their counterparts in the other clusters leading to a competitive edge in exploring and exploiting foreign market opportunities.

5.1.2. Cluster 2: “Should I stay or should I go” (lack of strategic orientation and strategy)

The second strategic cluster could be described as being “stuck in the middle”. In this group no definite strategic profile emerges and there is no definition of distinctive competences and assets. The firms seem to *look and/or wait for a vocation* or for motivation and neither reactive nor proactive motivations for internationalisation are considered relevant to the companies in this group. This group’s orientation might be primarily domestic as the lowest scores in “small size of domestic market” and “never considered Italy as the only market”, and the number of markets and export ratio all suggest (see Table 3). Along with this lack of a clear “reason-why” or commitment to internationalisation, management competences seem to constrain strategic behaviour, as not a single item operationalizing management drive and competence regarding internationalisation scores well in this cluster (see significantly low scores for these items in Table A1). Putting these factors, their comparatively low export ratio and the limited number of export markets together, this might be a group of opportunistic exporters with no clear orientation and consequently no clear strategy formulation or resource allocation.

5.1.3. Cluster 3: “Born to run” (entrepreneurial-growth oriented)

The cluster 3 firms may be described as the *entrepreneurial-growth oriented* group of SMEs. This cluster’s orientation is not only reflected in high cluster rankings on all performance- and growth-oriented items across all investigated areas (see significant mean differences in Table A1), but performance data from the cluster’s demographic profiles (see Table 3) also confirms this view, showing one of the highest and the fastest-growing export ratios across all clusters.

The cluster scores also show high satisfaction with competitive advantage/positioning – see Table 5. Businesses in this group seem to enjoy both successful definition and exploitation of competitive advantage. This advantage lies in *innovation and quality-orientation* (most strongly emphasized by significant mean differences regarding “development of new products and services”, “new production technology” as well as in quality orientation) again expressing superior internal capabilities and key assets (e.g. Bell et al., 2004; Calori et al., 2000).

The entrepreneurial dimension of these firms is not only demonstrated by the drive towards innovation as described above but also by consistently high scores in management characteristics indicating an *entrepreneurial attitude* (e.g. Knight, 2001; Kuivalainen et al., 2007; Zucchella & Scabini, 2007). Also, growth topics can be related to *opportunity seeking and risk-taking* given the greater uncertainty and risks of international expansion (Yli-Renko, Autio, & Tonnti, 2002). Thus, this group is best described as having an overall proactive attitude more than an adaptive approach. This also holds for this cluster’s standardization/adaptation practice expressed by significantly higher means across the clusters (see Table A1): in general,

Table 5

Selected questionnaire scores for cluster 3 firms.

Questionnaire item	Overall mean	Cluster 3 mean
<i>The cluster mean is high for:</i>		
Importance of expansion to new markets	4.10	4.74
Product/service quality	4.41	4.72
Importance of overall foreign sales growth	4.05	4.70
Importance of foreign sales growth in major markets	3.84	4.53
New product/service development	3.72	4.26
Company growth and profit goals	3.61	4.21
New production technology	3.20	4.00
<i>Standardization/adapt practice</i>		
Promotion targets	2.73	4.02
Price strategy	3.30	3.91
Payment terms	3.16	3.81
Advertising theme	2.59	3.81
Distribution channels	2.90	3.77
Changes in product lines across markets	3.04	3.74

Note: See Table A1 for the scores for all questionnaire items.

the cluster differentiates its marketing mix to varying requirements of international markets. This could give proof of a professional and “advanced” approach towards foreign markets, exploiting their innovation and quality capabilities.

As is the case in cluster 1, these SMEs realize a competitive advantage due to the fit between capabilities and strategy that leads them to outperform their competitors in foreign markets.

5.1.4. Cluster 4: “Strawberry fields forever” (product-oriented)

Cluster 4 companies are characterized by a strong *product-orientation*. They show generally the lowest values along the dimensions investigated. The firms however are relatively intensive internationalisers with consistent growth rates.

The mean scores for selected questionnaire items are shown in Table 6. Looking at within-cluster values, the issue of communication with all its sub-items and distribution policy are ranked as unimportant, whereas a certain emphasis is put on product-policy related topics such as “product packaging”, “product design” and “label/brand”. Putting together these factors with those scoring highest – product/service quality, in-time delivery, internet use and the importance given to manufacturing in terms of production process – one might suggest an orientation based on efficient production towards a limited number of customers or a narrow line of specialty. In this cluster an inward looking strategic attitude goes together with a high specialization in terms of specific production and service skills, leading to industry reputation for quality. Although the values reported in the following table do not show strong differences or even below average-values, they are expressive of a distinctive or pattern-breaking behaviour of this cluster when looking at across-cluster values or the importance given to these items within the cluster.

5.2. Performance cluster analysis

A second cluster analysis with international performance variables was performed. The agglomeration schedule suggests that either a 2-cluster or a 4-cluster solution might be appropriate – see Table 7. We have given preference to the 2-cluster solution because the agglomeration schedule shows an unstable pattern after the two-cluster solution step (decrease/increase then decrease once again) and, even more importantly, because the 2-cluster solution which differentiates high and low performers is highly significant and consistent (test $t = 5.4515$; p -value of $2.11e-05$).

Table 6

Selected questionnaire scores for cluster 4 firms.

Questionnaire item	Overall mean	Cluster 4 mean
In-time delivery	4.18	4.23
Product/service quality	4.41	4.00
Production process	3.39	3.37
Internet use	2.95	3.00
Product design	2.65	2.64
Product packaging	2.60	2.53
Label/brand	2.32	2.32
Advertising	2.82	2.14
Distribution channels	2.90	1.73
Promotion targets	2.73	1.59
Distribution budget	2.68	1.50

Note: See Table A1 for the scores for all questionnaire items.

Table 7
Performance cluster analysis.

Number of clusters	Agglomeration coefficient	Change in the agglomeration coefficient
2	518.395	1649.903
3	456.58	61.815
4	284.775	171.805
5	253.126	31.649
6	243.88	9.246

Bold values refer to selected number of clusters and relative agglomeration coefficients.

Table 8
Results from the logistic regression.

Explanatory variables	Baseline model	Full model
(Intercept)	−0.54 (0.39)	−1.82* (0.88)
Industry DA	−0.25 (0.50)	−0.26 (0.54)
Industry DB	−0.58 (0.51)	−0.74 (0.55)
Industry DK	−0.71 (0.44)	0.64 (0.47)
AGE	−0.003 (0.007)	−0.005 (0.01)
SIZE	0.007* (0.003)	0.007* (0.004)
FAMILY	−0.22 (0.38)	0.015 (0.42)
INDEPENDENT	0.66 (0.55)	0.87 (0.58)
CLUSTER 1	–	2.01** (0.67)
CLUSTER 3	–	1.71** (0.64)
CLUSTER 4	–	1.64** (0.54)
Log likelihood	−95.36	−85.45
Akaike Information Criterion	206.72	192.91
Misclassification rate	29%	25%

Notes: The sample size was 148 firms.

* Significant at the 5% level.

** Significant at the 1% level.

The high-performance cluster outcores the low-performance cluster not only in terms of export intensity and export intensity growth, but also in the satisfaction rates on all items ranging from profitability to comparative performance with competitors. The differences in the scores are often substantial, and independent-samples *t*-tests confirm statistically significant differences – see Table A2.

5.3. Logistic regression

How do these high and low performers distribute across the four strategic groups? If our hypothesis is correct, one would expect high performers mainly in the groups with a clear strategic orientation and congruent strategy. Logistic regression was employed in order to determine influence of strategy type on international performance. The dichotomous variable (high/low performer) was the dependent variable. Several control variables were included among the explanatory variables: firm size (number of employees in 2005); firm age (years from foundation to 2007); a family ownership dummy variable; an independent firm dummy; and four industry dummies for firms in the textiles & apparel (NACE sector DB), machinery & mechanics (NACE sector DK), food & beverage (NACE sector DA) industries, and 'other industries' used as the base category. In addition, three strategic orientation dummies were included, corresponding to membership of clusters 1, 3 and 4 respectively. Cluster 2 (the lack of strategy) was taken as the base category.

The regression results are reported in Table 8. Two versions of the model were estimated: the baseline model with just the control variables, and the full model containing the strategic type variables as well. In the baseline model only firm size is statistically significant. The value of the AIC is 206.72, and the misclassification rate is 29%. The inclusion of the three strategic type dummies leads to a significant improvement in the explanatory power of the model ($\chi^2 = 9.91$, $p = 0.05$), a reduction in the value of the AIC to 192.91, and a lowering of the misclassification rate to 25% (i.e. one in four cases).⁵

The *t*-ratios for the cluster 1, cluster 3, and cluster 4 dummy variables are all about three and hence very significantly different from zero, suggesting that a clear strategy (1, 3 or 4) is better than no strategy (2). The coefficients of these three clusters – namely the customer oriented/niche firms, the entrepreneurial/growth oriented firms, and the product-oriented firms – are highly significant and positively related to international performance. Firm size is also significant ($p < 0.05$), but the small size of the coefficient suggests that the effect is not that important: a doubling in firm size increases the likelihood

⁵ In particular, with regards to the latter measure, the implemented analysis protocol was enriched with a training-validation approach (quotas respectively 75% and 25%) in order to choose the logistic model with the best predictive performance.

of being a high-performer by about 4%. In contrast, the impact of having a clear strategy raises the probability of superior international performance by 30–38%. For the ‘average’ firm, a clear strategic (customer, growth or product) orientation raises the probability of being a high performer by almost five times compared to firms lacking strategic orientation and strategy. The results therefore support the hypothesis clear strategic orientation and congruent strategy impact positively on international performance.

6. Discussion

Our findings describe a number of viable strategic types for SMEs to prosper and survive in their competitive international environment, and provide evidence of distinct SME profiles and strategic patterns. Our SME types share many commonalities with existing strategic management and marketing typologies found for large firms: the entrepreneurial/growth oriented group shares the characteristics of the Miles and Snow (1978) groups of prospectors and analyzers. These firms, similarly to our types, have been described as being growth-oriented and putting emphasis on new product and service development as well as being prone to “marketing” in general. Our product/inward-oriented type could be compared to defenders, with its attention towards manufacturing and quality, and propensity to ignore customer orientation and communication instruments. The Miles & Snow reactors correspond to our group of “should I stay or should I go” firms, in that both are described as lacking a consistent strategic profile.

However, our work highlights strategic types related to the behaviour of internationally oriented SMEs. Our findings differ from Miles & Snow in that we also identify typologies which draw upon the marketing and innovation literature. In particular, while Miles & Snow focus on a more or less proactive attitude towards the external environment, our typology includes both inward (product-oriented firms) and outward orientations (customer-oriented and growth-oriented firms). These outwardly oriented firms are differentiated according to a “follow the customer” or an “anticipate/create the market” (i.e. proactive, innovative) attitude.

Our four strategic types are examined through the SO construct and the firms’ strategic behaviour, as reflected in their sources of competitive advantage and by their functional strategies. Customer/market orientation has frequently been associated with differentiation in extant research (Homburg et al., 2004; Pelham & Wilson, 1996), but we find a predominant combination of customer orientation and niche strategy. In an international context, this combination has been described as an effective one (Campbell-Hunt, 2000; Frambach et al., 2003; Luostarinen & Gabrielsson, 2002), and as a successful route to small firm internationalisation (Zucchella & Palamara, 2007). Differentiation in our sample is linked to the entrepreneurial/growth-oriented type of firms, which is the only group that emphasizes adaptation of marketing to main foreign markets. Further, some common traits between alternative orientations emerge: the entrepreneurial group is characterized by aspects of innovation orientation in terms of new product/process development as has been described by Avlonitis and Salavou (2007). Both the customer-oriented group and the entrepreneurial/growth-oriented type of businesses score high on management characteristics and competencies being indicative of a high degree of “international orientation”. These attitudes and characteristics, represented by an international background, a global mindset as well as motivation and commitment towards internationalisation, have been stressed as influences of export performance (Aaby & Slater, 1989). They are considered here to incorporate the international dimension of SME strategic behaviour. However, in this context and in our sample of international SMEs, “international orientation” has to be seen more as a continuum than a dichotomy between proactive and reactive firm attitudes.

In every strategic cluster it is possible to identify strengths and weaknesses of the approach followed by the firms and to predict the probability of internationalisation success. This strategic type – international performance relationship is statistically supported by the logistic regression analysis. The probability of being a high performer in foreign markets for the entrepreneurial/growth-oriented type, the customer/niche group of firms and the production-oriented businesses is almost five times higher as that for the firms lacking orientation and strategy. These businesses are characterized by higher export ratios and more consistent growth rates over the eight year survey period and they are more satisfied regarding additional measures such as international market shares, product performance and the profits realized abroad.

Our results are thus in line with findings related to the Miles and Snow strategy types and strategic orientation research in domestic markets that contend that firms with clear strategic profiles or orientation in general perform better than their less strategic counterparts (Cano, Carrillat, & Jaramillo, 2004; Conant et al., 1990; McKee et al., 1989; Miles & Snow, 1978; Pelham & Wilson, 1996; Pelham, 2000; Shoham et al., 2005; Snow & Hrebiniak, 1980).

7. Conclusions

Our study confirms a positive relationship between international strategic types (as expressed by strategic orientations and the related competitive and functional strategic decisions) and international performance. Three out of four strategic types identified in the sample of international SMEs – notably the customer, entrepreneurial, and product-inward, strategy types – pursue more actively international opportunities, expand more rapidly, and exhibit superior international performance when compared to the fourth type represented by those firms lacking any clear strategy. Our findings therefore complement extant research on strategic orientations that has shown positive results regarding the orientation–performance relationship in domestic contexts and/or large firms. It also confirms earlier international entrepreneurship studies that put entrepreneurial/growth orientation at the core of superior performance and accelerated internationalisation

patterns that challenged the traditional routes to international expansion (e.g. Oviatt & McDougall, 1994). Further, the results add to the limited empirical evidence regarding strategic orientations and strategic types in international contexts that has shown mixed results. Whereas prior research mainly investigated the impact of one single strategic orientation on internationalisation success, we provide evidence of differentiated strategic types and observe significant linkages between alternative strategic types and international performance.

The outcomes of the cluster analyses are relevant for managers and entrepreneurs in that they allow a business to be positioned in one of the four strategic groups and thus to compare the firm's characteristics and performance with the other clusters. In particular, our research might support the development and consolidation over time of strategic decisions which address, on the one hand, the small firm's growth objectives, its competences and resources and, on the other hand, the opportunities in international markets. The outcomes are also relevant for policy-makers because they reveal that small firms are not isomorphic from the viewpoint of strategic orientation and behaviour. Thus, they need to be approached with differentiated policies, according to the potential risks and weaknesses underlying each cluster profile. For example, firms lacking strategic vision and orientation should be primarily addressed with strategic capacity-building mentorship rather than specific export support measures.

This research also has limitations, in particular, the dataset is limited to Italian companies, and the analysis may be subject to country-specific biases. The same holds for the sector, with the dataset just consisting of manufacturing firms. The methodology may be criticized on the grounds that it cannot completely differentiate strategic profiles, which overlap in some dimensions. This is also evident in business reality, where our strategic types represent a simplification of the reality itself – a simplification which is helpful for classifying firms and understanding their international behaviour, but which also throws up a number of grey areas among clusters. In addition to this our analysis cannot capture the evolution of firms from one type to another, a process which is likely to occur continuously – at least in the medium-long term – in the life of firms. Future research might try to confirm and fine-tune the strategic types in order to verify if they hold on a wider geographic scale. Also, a longitudinal study of firm strategic clusters might yield interesting insights on long-term internationalisation behaviour and development and related performance consequences.

Appendix A

See Tables A1 and A2.

Table A1
Mean questionnaire scores for the four strategic type clusters.

Item nr.	Overall mean	Cluster 1	Cluster 2	Cluster 3	Cluster 4	LSD
<i>Motivations for company internationalisation</i>						
1 Company growth & profit goals	3.61	3.70	3.47	4.21	2.68	0.54
2 Managerial urge for internationalisation	3.66	4.33	2.94	4.14	3.50	0.52
3 Managers' int experience	3.18	3.67	2.58	3.81	2.68	0.54
4 Competitors' success on foreign markets	2.73	2.93	2.11	3.40	2.64	0.52
5 Internat. of customers	3.22	3.63	2.79	3.86	2.41	0.62
6 Product uniqueness	3.61	3.80	3.47	3.91	3.09	0.60
7 Economies of scale	2.55	2.30	2.38	3.14	2.14	0.55
8 Tax benefits	1.54	1.50	1.25	2.07	1.27	0.40
9 Competitive pressure on domestic market	2.99	2.83	2.72	3.47	2.95	0.60
10 Company never considered Italy as only mkt	3.93	4.57	3.30	4.42	3.64	0.52
11 Small size of domestic market	2.83	2.83	2.57	3.35	2.45	0.59
12 Overproduction	1.93	1.67	1.91	2.14	1.95	0.54
13 Unsolicited orders	2.29	2.10	2.34	2.40	2.23	0.56
14 Proximity to intl customers	2.57	2.40	2.30	3.28	2.09	0.59
<i>Strategy and competitiveness in major foreign markets...</i>						
15 Product satisfies a particular need	3.34	3.44	3.41	3.37	2.95	0.49
16 Niche but many target markets	3.36	3.53	3.40	3.37	3.05	0.38
17 More adapted than standardized product	3.65	4.03	3.64	3.60	3.23	0.59
18 Our product perceived of higher quality	4.06	4.17	4.04	4.28	3.55	0.42
19 Techn. unique product/service	2.82	3.00	2.68	3.16	2.27	0.61
<i>Level of competitiveness – main foreign markets regarding...</i>						
20 Customer knowledge	3.68	4.17	3.49	4.00	2.82	0.48
21 Competitor knowledge	3.46	3.87	3.32	3.77	2.64	0.49
22 Customer satisfaction	4.32	4.63	4.17	4.58	3.77	0.33
23 Product/service quality	4.41	4.53	4.25	4.72	4.00	0.31
24 New product/service development	3.72	3.87	3.36	4.26	3.36	0.45
25 New production technology	3.20	3.10	2.89	4.00	2.55	0.54
26 Branding of product/service	3.11	3.27	2.74	3.77	2.50	0.54
27 Product positioning	3.40	3.50	3.15	3.95	2.77	0.46
28 Width and depth of product portfolio	3.60	3.83	3.40	3.95	3.09	0.52
29 Terms of payment	3.25	2.90	3.32	3.67	2.73	0.54
30 Advertising	2.82	2.87	2.45	3.60	2.14	0.57

Table A1 (Continued)

Item nr.		Overall mean	Cluster 1	Cluster 2	Cluster 3	Cluster 4	LSD
31	Personal selling	3.29	3.27	3.34	3.53	2.73	0.61
32	Internet use	2.95	2.40	2.75	3.53	3.00	0.59
33	Other promotion	2.36	2.10	2.17	2.98	1.95	0.53
34	Distribution	2.89	3.03	2.51	3.70	2.05	0.59
35	Relationships with export intermed.	3.03	2.90	2.75	3.60	2.73	0.59
36	Production process	3.39	3.08	2.73	4.12	3.37	0.54
37	Sub-contracting	1.67	2.00	1.45	1.88	1.32	0.50
38	In-time delivery	4.18	4.17	3.96	4.42	4.23	0.45
39	Networking	2.68	3.60	2.02	3.44	1.55	0.59
40	Overall competitiveness	3.90	4.20	3.64	4.42	3.09	0.37
<i>Functional/marketing strategy: adapt/stand regarding...</i>							
41	Label/brand	2.32	1.60	2.08	3.12	2.32	0.64
42	Product design	2.65	2.07	2.60	3.12	2.64	0.68
43	Changes in product line across mkts	3.04	2.47	3.00	3.74	2.55	0.62
44	Product packaging	2.60	1.67	2.50	3.40	2.53	0.61
45	Price strategy	3.30	2.67	3.60	3.91	2.27	0.57
46	Payment terms	3.16	2.77	3.19	3.81	2.32	0.56
47	Discounts	2.91	2.43	2.89	3.60	2.23	0.59
48	Target profit	3.23	2.77	3.30	4.02	2.14	0.48
49	Advertising theme	2.59	1.60	2.58	3.81	1.55	0.51
50	Advertising channels	2.68	1.93	2.75	3.70	1.50	0.54
51	Promotion budget	2.55	1.73	2.38	3.91	1.45	0.46
52	Promotion targets	2.73	1.73	2.72	4.02	1.59	0.52
53	Transportation strategies	2.99	2.47	3.13	3.70	2.00	0.63
54	Distribution budget	2.68	1.80	2.91	3.63	1.50	0.53
55	Distribution channels	2.90	2.20	3.08	3.77	1.73	0.58
<i>Management issues: level of importance given to...</i>							
56	Internat orientation of management	3.85	4.60	3.32	4.26	3.32	0.43
57	Internat experience of managers	3.60	4.13	3.13	4.14	2.95	0.49
58	Managements level of education	3.70	3.97	3.42	4.14	3.18	0.45
59	Management fluency in languages	3.90	4.40	3.40	4.28	3.68	0.47
60	Mgmts commitment to foreign bus.	4.11	4.63	3.70	4.47	3.68	0.44
61	Expansion to new markets	4.10	4.40	3.70	4.74	3.41	0.41
62	Profitability of foreign operations	3.97	4.27	3.77	4.35	3.32	0.41
63	Overall perf in foreign markets	3.76	4.03	3.45	4.35	3.00	0.36
64	Overall main product performance	3.84	4.03	3.68	4.35	2.95	0.35
65	Perform. main product/major markets	3.94	4.10	3.74	4.47	3.18	0.41
66	Overall foreign sales growth	4.05	4.20	3.57	4.70	3.73	0.43
67	Foreign sales growth in major markets	3.84	3.90	3.45	4.53	3.36	0.39
68	Overall market share abroad	3.34	3.63	2.85	4.19	2.50	0.45
69	Market share in major markets	3.39	3.77	2.89	4.23	2.45	0.48
70	Performance compared to main comp.	3.61	3.70	3.40	4.33	2.64	0.48
71	Performance in main markets vs comp	3.61	3.67	3.42	4.33	2.59	0.44
72	Achievement of goals set for internat	3.96	4.20	3.53	4.51	3.59	0.53

Table A2

Mean questionnaire scores for the two performance clusters.

Performance measures	Overall mean	Cluster 1 High performers	Cluster 2 Low performers	t-Statistics
Export intensity 2005 in %	48.41	67.96	18.26	<2.2e-16***
Growth rate (2005 over 2000)	8.36	14.33	3.15	0.0001***
Satisfaction with (period 2003–2005)				
Performance of main product in major markets	3.53	3.79	3.32	0.19
Expansion to new markets	3.53	3.64	3.43	0.83
Achievement of goals set for internationalisation	3.52	3.76	3.32	0.0009***
Overall main products performance	3.51	3.82	3.25	0.0003***
Overall foreign sales growth	3.5	3.7	3.33	0.0040**
Foreign sales growth in major markets	3.47	3.72	3.26	0.0360*
Profitability of foreign operations	3.45	3.46	3.43	0.0058**
Overall performance in foreign markets	3.41	3.66	3.21	0.0013**
Performance compared to main competitors	3.37	3.58	3.2	0.0014**
Performance in main markets compared to competition	3.36	3.6	3.17	0.0235*
Market share in major markets	3.09	3.39	2.85	0.0111*
Overall market share abroad	3.03	3.31	2.79	0.0080**

* Significant at the 5% level.

** Significant at the 1% level.

*** Significant at the 0.1% level.

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