

Roberto Cafferata

**Competitive Advantage
and Internationalization
of Italian Small and Medium-Sized
Manufacturing Firms**



University of Rome "Tor Vergata"
Università degli Studi di Roma "Tor Vergata"

Department of Business Studies
Dipartimento Studi sull'Impresa (DSI)

DSI Essays Series

Editor in Chief

Roberto Cafferata – University of Rome “Tor Vergata”, Italy
[cafferata@economia.uniroma2.it; cafft2002@yahoo.it]

Scientific Committee

Alessandro Carretta – University of Rome “Tor Vergata”, Italy
Corrado Cerruti – University of Rome “Tor Vergata”, Italy
Sergio Cherubini – University of Rome “Tor Vergata”, Italy
Alessandro Gaetano – University of Rome “Tor Vergata”, Italy
Claudia Maria Golinelli – University of Rome “Tor Vergata”, Italy
Hans Hinterhuber – University of Innsbruck, Austria
Joanna Ho – University of California, Irvine, U.S.A.
Anne Huff – Technische Universität München, Germany
Morten Huse - Norwegian School of Management BI, Norway
Marco Meneguzzo – University of Rome “Tor Vergata”, Italy
Paola Paniccia – University of Rome “Tor Vergata”, Italy
Cosetta Pepe – University of Rome “Tor Vergata”, Italy
Harald Plamper – Zeppelin University in Friedrichshafen, Germany
Francesco Ranalli – University of Rome “Tor Vergata”, Italy
Salvatore Sarcone – University of Rome “Tor Vergata”, Italy
John Stanworth - University of Westminster, United Kingdom
Jonathan Williams - Bangor Business School, United Kingdom

Managing Editors

Emiliano Di Carlo – University of Rome “Tor Vergata”, Italy
[dicarlo@uniroma2.it]

Sara Poggesi – University of Rome “Tor Vergata”, Italy
[sara.poggesi@uniroma2.it]

Mario Risso – University of Rome “Tor Vergata”, Italy
[mario.risso@uniroma2.it]

Guidelines for Authors

Papers accepted by scientific conferences/symposiums/seminars, not yet published, can be sent for consideration for publication in the DSI Essays Series. The length of each manuscript should be maximum 40 typed pages (10.000 words) including notes, references and appendices, where appropriate. Manuscripts should be submitted in electronic format (Word for Windows) by the author to the Editor in Chief and the Managing Editors, who will then ask two members of the Scientific Committee to supply a short written review. The paper, in case revised, will be sent again by the author to the Editor in Chief and the Managing Editors.

At the end of the process, the Editor in Chief will authorize the publication of the scientific work. The Managing Editors will insure the loading of all the accepted papers into the RepEc and SSRN database.

DSI Essays Series

Roberto Cafferata

Competitive Advantage and Internationalization of Italian Small and Medium-Sized Manufacturing Firms

n. 1

McGraw-Hill

Milano • New York • San Francisco • Washington D.C. • Auckland
Bogotá • Lisboa • London • Madrid • Mexico City • Montreal
New Delhi • San Juan • Singapore • Sydney • Tokyo • Toronto

Copyright © 2009 The McGraw-Hill Companies, S.r.l.
Publishing Group Italia
Via Ripamonti, 89 – 20139 Milano

McGraw-Hill



A Division of the McGraw-Hill Companies

All rights reserved.

No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written consent of The McGraw-Hill Companies, Inc, including, but not limited to, in any network or other electronic storage or transmission, or broadcast for distance learning.

Production: Donatella Giuliani

ISBN 978-88-386-6656-8

Printed and bound in Italy by Pronto Stampa, Fara Gera d'Adda (Bg)
123456789PRSPRS109

Competitive Advantage and Internationalization of Italian Small and Medium-Sized Manufacturing Firms

Roberto Cafferata¹

Abstract

The paper aims at exploring the factors needed by small and medium sized manufacturing enterprises to obtain a successful positioning in the international market and at identifying what there is at the root of their competitive advantage.

Using a sample of 519 small and medium sized firms, with 20 to 250 employees, operating in five Italian regions, the empirical evidence reveals that the competitive advantage of Italian small enterprises is based upon a combination of elements such as price, differentiation and high technical standards of the product. According to this study, to be competitive in respect of price remains however the imperative of Italian SMEs' behaviour in international markets.

JEL Classifications:

L60, L25, L11, L15, M16

Keywords: Competitive Advantage, Internationalization, Small and Medium Enterprises (SMEs), Manufacturing Firms.

¹ Full Professor of Management, University of Rome "Tor Vergata", Faculty of Economics, Department of Business Studies.

Contents

1. Foreword	3
2. Old and new factors of competitive advantage	4
3. Price and non-price competition	6
4. Sample characteristics and data processing	8
5. Sources of competitive advantage	9
6. Success factors of the Italian enterprises	10
7. Conclusion	11
References	12
Tables	17

Editorial notes

Paper presented to “Rent IX”, Università Cattolica del Sacro Cuore/Catholic University of the Sacred Heart, Piacenza-Campus, 23-24 November 1995. Revised 2008 edition.

1. Foreword

A rich and heterogeneous literature has already analysed what lies at the basis of the success of Italian small and medium-sized businesses and has identified in the *flexible specialisation* model what appears to be the general framework enabling us to understand the determinants for the survival and growth of this organizational typology (Becattini, 1979; Brusco, Sabel, 1981; Lazerson, 1988; Becattini, 1989; Garofoli, 1989; Amin, 1989; Pyke, Becattini, Sengenberger, 1990).

In the Nineties, with respect to the intensive reorganization and restructuring phase that is taking place within domestic and international markets, the need emerged for reviewing those factors and conditions that are said to have made it possible for Italian small and medium-sized businesses to gain a competitive advantage. A research unit, supported by the Italian National Research Council, operating at the Department of Business Studies of the University of Rome Tor Vergata, concluded in 1995 a research study started in 1992 having a twofold objective:

- a) to summarize the fundamental factors that are said to enable small and medium-sized firms to survive within international markets;
- b) to highlight the sources of the competitive advantage actually attained by Italian small businesses.

This paper reports the results obtained by the aforesaid research study, involving a sample of 519 small and medium-sized firms, employing 20 to 250 workers, operating in different industries of the manufacturing sector. The addresses were drawn from a database of the Chambers of Commerce. The study was carried out in five regional areas: Milan, Genoa, Umbria, Romagna and Abruzzo. The questionnaire submitted to each entrepreneur was completed with the help of a professional interviewer, during a meeting previously fixed by telephone some days after the questionnaire was posted.

The study also attached special attention to a subset of 250 small exporting companies: they were arbitrarily considered to have an *international vocation (or orientation)* given the fact that more than 20% of their overall sales were realized in foreign markets.

2. Old and new factors of competitive advantage

By *advantage* in a period of time we mean the leadership achieved by a firm, in terms of sales in a given industry, with respect to its competitors, deriving from the proactive use of unique resources or peculiar skills developed during its life cycle (Porter, 1985a; Barney, 1991). The successful behaviour of the leader(s) draws attention and imitation from the followers.

Porter pointed at two distinct fundamental types of forces governing the firm towards competitive advantage:

- cost leadership, achieved not only by rational management of the production function, but also by skilful manoeuvring of all the interfunctional relationships within the enterprise system in order to reduce coordination costs (this policy enables the firm to use the price weapon with some discretion);
- product differentiation, obtained by suitably mixing marketing elements other than price, i.e. the ability to modify the tangible and intangible characteristics of the goods or services provided to the consumer (this policy enhances the non price competitiveness of the firm).

In the firm's behavior oriented by cost leadership, competitive advantage is pursued through economies of scale, exploitation of the experience curve and rigorous control of overhead costs. Differentiation policies rest upon the entrepreneur's ability to stand out against its direct competitors not only as to the *price factor*, but also as regards the upgrading of products, the technical assistance given to customers and the selection of efficient distribution channels, that is the *non price factors of competition*.

The two different types of competitive advantage factors mentioned above can be said to depend on two quite different strategic options. Whenever a firm tries to combine these two factors for the conquest of particular customers or particular markets, a third type of strategy emerges, namely the *focus strategy*: the firm tries to make a "segmentation" of the market and this implies that the market be subdivided into demand segments in whose direction the competitive activities of the firm will be activated. This strategy can sometimes focus on price and at others on product differentiation, according to the particular demand to be met or according to the competitive conditions prevailing at the time.

As far as the firms' strategy is concerned, there is a widespread agreement among researchers that large and small enterprises seek competitive advantage in a different way. The strategies adopted by *large enterprises* seem to be mostly

oriented either to cost leadership or to product differentiation, while the behaviour of *small businesses* appears to be mostly based upon choices that could be ascribed to a focus strategy, involving the pragmatic enactment of contingent competitive factors (Bamberger, 1982; Kaynak, Kothari, 1984, O'Rourke, 1985; Craig, Beamish, 1989; Bonaccorsi, 1992; Calof, Beamish, 1995). Moreover, small and medium sized enterprises seem to be particularly vulnerable to environmental shifts in international markets because their information systems are generally unable to detect early changes of the competitive forces, and their responses tend to be slow and inefficiently delivered (Ait El Hadj, Bidault, 1980; Covin, Slevin, 1989; Morgan, Katsikeas, 1998).

A series of recent contributions have also casted a new light on SMEs internationalization strategic choices with particular reference to the relationship between strategy and structure (Steinmann, Kumar, Wasner, 1980; Varaldo, 1987; Welch, Luostarinen, 1988; Rosson, Reid, 1989; Dichtl, Koeglmayr, Mueller, 1990; Andersen 1993). The results from empirical research have however proven quite contradictory. Some authors support the stage model of internationalization of the firm; this model was first introduced by the so called Scandinavian school, according to which small enterprises seeking internationalization exhibit an evolutionary pattern of behaviour; in other words they go abroad through a series of incremental initiatives. According to this view, firms can evolve from a preliminary exporting stage to a clear multinationalization stage (Johanson, Vahlne, 1977; Welch, Olson, Wiedersheim-Paul, 1978; Kwon, Hu, 1995).

The results of other research studies stress the importance of small firms' structural flexibility, low organizational costs and managers' ambitions in pushing internationalization. These characteristics are largely independent of the enterprise history and the stage of the life cycle (Cavusgil 1984; Kaynak, Kothari, 1984; Schlegelmilch, 1986; Evans, 1991; Calof, Beamish, 1994; Sanchez, 1995). Foreign market opportunities emerge and disappear quickly. Erratic and turbulent environments suggest the making and implementation of decisions which are very different the one from the other (either importing and exporting, or cooperating, or establishing organisational units abroad). In any case, this does not imply a deterministic incremental approach to the internationalization of the firm (Varaldo, 1987; Ghauri, 1987; Sullivan, Bauerschmidt, 1990; Millington, Bayliss, 1990).

According to a growing number of research studies, the possibility of achieving a lasting competitive advantage in international markets seems to be related to product innovation and to the entrepreneur's ability to introduce even marginal innovations in the production/manufacturing process. In par-

ticular, the use of information technology is reported as a means for improving firm's performance through cost reduction, better quality and time-to-market new products. There is a growing evidence of the complementarity of cost leadership strategies and differentiation strategies. This kind of complementarity is emphasized by the introduction of information technologies in the manufacturing and selling of products, which contributes to differentiate outputs, while lowering the cost of inputs (Freeman 1974; Porter, 1985b; Bessant, Lui, 1986; Acs, Audretsch, 1988; Drucker, 1990; Rainnie, 1991). Therefore, the full exploitation of the potentiality of information technologies is highly recommended not only in the factory, but also in the offices of small firms for the enhancement of their strategic and structural flexibility (Holmes, Kelly, Cunningham, 1991; Geisler, 1992; Raymond, 1992; Cafferata, Mensi, 1995; Quaglia, 1996).

In more recent times a new competitive factor, customer service, is reported to play a major role in the achievement of competitive advantage (Levitt, 1972; Chase, 1982; Groenroos, 1988; Ferrero, 1992). Service makes it possible to better qualify the supply of products; innovative manufacturers consider it as an intrinsic part of the product offered to the end market. The reason why manufacturers try to combine products and services has something to do with customers' behaviour. Customers not only expect lower prices, but also a wide and varied range of products, shorter delivery times, good technical assistance, improved payment terms, efficient distribution channels. Thanks to strategies based on customer service, firms can better differentiate their products and look for a competitive advantage more lasting than that just guaranteed by low prices. A sustainable advantage seems to be particularly tied to the quantity and quality of services that cannot be imitated by competitors (Quinn, 1988; Barney, 1991).

As a lever of competitiveness, has the role of price been forgotten or left in the backstage by Italian entrepreneurs?

3. Price and non-price competition

Since the early seventies the export rate of the Italian manufacturing firms has been constantly on the increase: in a context of European integration and globalization, the competitive behaviour of Italian small and medium-sized businesses seems to be much more dynamic than that of large firms (Mele, 1986; Varaldo, Rosson, 1992; Becattini, 1989; Schwalbach, 1994; Genco, 1995; Varaldo, Bellini, Bonaccorsi, Riccaboni, 1998).

The strategic and organizational models adopted by the Italian SMEs in order to start their internationalization process have been reported by a wide-ranging literature (Pecci, Marria, 1979; Scott, 1983; Pepe, 1984; Varaldo, Rosson, 1992; Grandinetti, Micelli, Rullani, 1993). According to these research studies, the main points of strength of the Italian small enterprises can be listed as follows:

- i)* owner entrepreneur's personal skills;
- ii)* constant renewal of manufacturing processes;
- iii)* efficiency either in promoting product innovation or in imitating technological leaders: this is the reason why Italian entrepreneurs were able to implement both cost-based and quality-based strategies;
- iv)* ability in relating organizational models (such as franchising, networks and outsourcing) to specific production and distribution needs.

On the other hand, the limits of the Italian SMEs' competitiveness are essentially due to their weakness in choosing rationally an internationalization strategy (Pepe, 1988; Grandinetti, Micelli, Rullani, 1993). Moreover, Italian entrepreneurs traditionally tend to consider sales abroad as an activity that is ancillary to domestic market penetration. Whenever small firms decide to adopt an internationalization strategy, it turns out to be an import and export strategy. What ensued was the failure in the effective and efficient integration of marketing, distribution and logistic resources with production capabilities (See also Pratten, 1990, as far as the British SMEs are concerned).

These limits are apparent in a phase of growing pervasiveness of the micro-electronic innovation matrix not only in the production function, but also in other functional areas (Barron, Curnow, 1979; Di Bernardo, Rullani, 1990). The empirical investigations and the research studies by Frey (1995) and Carlesi (1995) - which are also part of this CNR project - discuss the gap between the high capacity of small businesses to avail themselves of advanced technologies for production purposes and the inadequacy of their information systems to link the manufacturing activity both to other internal functions, and to domestic or international market outlets. In particular, there is an insufficient use of modern computerized systems for goods handling and stocking, whilst efficiency in these areas is of paramount importance in order to reduce overall costs, improve the quality and increase the differentiation of products (Porter, 1985a).

4. Sample characteristics and data processing

We have already said that the sample we utilized in our research study involved 519 firms. Of these firms, 250 have been engaged in some sales activities abroad. Having considered the most unfavourable condition ($p=0.50$), in order to generalize with sufficient accuracy our results at the fiduciary level of 95%, we underline that the probed fraction of 519 firms leads to a sample error of plus or minus 4% in the case of a simple randomized sampling.

In order to verify the generally accepted assumptions on the reasons of success and competitive advantage of Italian SMEs, the focus of our analysis was put on those enterprises which have declared of operating on international markets in a significant way, that is they normally place at least 20% of their sales abroad. In this way we were able to enucleate 215 enterprises (i.e. 41% of the entire sample), which we define as *enterprises with an international market orientation (IMOs)*.

Our data analysis was split in two different parts. The first part highlights the factors by which the 215 selected small businesses compete on international markets. A comparative analysis of these enterprises and those with a *domestic market orientation (DMOs)* was also carried out. In the second part of our analysis we tried to verify whether the 215 enterprises were looking either for price-based competitive advantages, or for differentiation and/or segmentation-based advantages.

Data processing has led us to the drawing up of a series of tables that were instrumental to the cross-sectonal study of small businesses, thus making it possible to detect some significant behavioural characteristics of the entire sample and in particular of the SMEs with an international vocation.

The processing of data was done by means of univariate and bivariate analysis. The bivariate analysis utilized the Pearson index (chi-square) to measure the relationship between two variables, considering only those indexes with a statistical level of significance equal to or lower than 0,05.

The 250 SMEs with an international vocation are concentrated in the class employing up to 49 workers; of considerable importance are, however, those enterprises falling in the middle class employing 50 to 99 workers. Enterprises with a domestic vocation are mostly present in the class employing up to 49 workers (Table 1).

A significant correlation between organizational size and internationalization of the firm's activities is statistically confirmed. When referring to the amount of sales, the previously stated concentration of the firms is once again confirmed. While the entire sample is concentrated in the class below 10 bil-

lion, the IMO are significantly present in the brackets from 10 billion upwards (Table 2). Almost 40% of the IMOs place more than 50% of their sales abroad (Table 3), which confirms the good attitude of Italian enterprises towards the international markets. The majority of IMOs envisaged a marked upswing of their sales abroad during the '90s.

It is important to notice that the small businesses of our sample do not operate within territorial settings that are currently defined as "industrial districts", which are characterized by a clear common interest and high level of mutual interdependence. Moreover, Table 4 shows that about 68,7% of the entire sample and 66% of the enterprises with an international vocation have no proprietary link or business connection with other enterprises. When interfirm cooperation emerges (Table 5), it is particularly strong as far as distribution, finance and production are concerned. In summary, the composition of our sample is appropriate to verify the existence of competitive advantage factors different from those deriving from cooperation and solidarity which traditionally support the internationalization of SMEs operating in "industrial districts".

5. Sources of competitive advantage

Competitive advantage is reached through the generation of unique skills in the management of specific systemic resources or in the integration of different resources within and among different functional areas of the firm (production, sales, marketing, R&D, finance, etc.).

Table 6 shows that the Italian small manufacturing firms try to obtain a competitive advantage thanks to investments in the production function: 83% of the whole sample attaches the greatest importance to the manufacturing process; Table 6 also shows that there is no difference between IMOs and DMOs. This result suggests that:

- without efficient production processes and failing a good product, most Italian small entrepreneurs think there is no lasting success;
- the simple upgrading of marketing and selling activities is considered insufficient to guarantee competitive success.

Marketing activities rank second in terms of importance, and this applies mostly to IMOs. Price is the most significantly manoeuvred element of the marketing mix. A little less important appears to be the choice of distribution channels. Product promotion and advertising-related aspects do not play an equally important role, though it is impossible to foster any sales without them. The procurement function plays a role which is not less important than the one of marketing.

Other functions follow in ranking order: research and design of new products, general administration, finance, personnel management. It must be stressed that R&D and design functions acquire a major importance within those enterprises that are systematically involved in any international activity.

As to the technologies used for production, Table 7 shows that about 54,9% of the enterprises characterized by a significant export activity make use of "flexible automation systems": CAD systems and numeric control machines are the forms of automation mainly used. Export-oriented enterprises show a utilization index of advanced technologies markedly higher than that displayed by small industrial enterprises with a domestic vocation.

Let us now see what kind of planning and control systems are used in Italian SMEs. About 30% of IMOs adopt an integrated system for planning and control purposes. There is evidence that DMOs are not so interested in formal planning systems as the international market oriented enterprises (Table 8). Production management represents the area which is mostly affected by formal planning and control systems. The widespread use of formal procedures in both production and communication or data processing is particularly developed in those enterprises which have the strongest international vocation (Cafferata, Mensi, 1995).

6. Success factors of the Italian enterprises

Italian small manufacturing firms operating in foreign markets mostly compete with larger and sometimes multinational businesses. The international environment submits them to an extremely dynamic competition, which stimulates them to develop the distinctive competences that are needed for surviving and coping with the environmental stress (Varaldo, Rosson, 1992). When looking at the entire sample, it appears that price is the most important factor used for competition purposes. This applies both to IMOs (66%) and DMOs (76%). Other statistically significant success factors are product's quality and differentiation: both factors are connected to the strength of functions such as marketing and distribution (Table 9).

When SMEs have to compete in the *national market*, the most important non-price success factors seem to be the relations with important customers and commercial intermediaries, customer service and the use of advanced equipments for production. This applies to both IMOs and DMOs (Table 10). When, on the contrary, business operations are carried out in *international markets*, the success factors radically differ from above: product features such as high technical standards, product innovation and organizational efficiency - to-

gether with strong ties with important customers - are more relevant success factors than relations with commercial intermediaries, customer service and the use of advanced equipments (Table 11).

A further step of our analysis was aimed at verifying the possible convergence of the price factor with other non-price factors whenever Italian SMEs seek a competitive advantage on international markets. The univariate analysis allowed us to find how competition factors differ according to the different market strategies adopted by IMOs and DMOs. The use of the Pearson index, the Likelihood ratio and the Mantel-Haenszel test made it also possible to verify the significance of the collected data.

There is evidence of a strong positive correlation between the price factor and the non-price determinants of competitive success (Table 12). The competitive advantage obtained by Italian firms operating in international markets is based on a *combination of elements* such as price, product innovation and customer service. The ability to combine the different competitive advantage factors is an important indicator of entrepreneurial dynamism.

As to the sources of this kind of competitive advantage, the Pearson index shows that R&D and design together with marketing play the most important role, while information technologies are mostly used for finance management and organization control. Pearson index also underlines the importance of formal planning systems in the management of production, sales and procurement.

Consulting is requested by SMEs with an international vocation, as regards particularly marketing, finance and product design.

7. Conclusion

In conclusion: being competitive in respect of price is the imperative of Italian SME. The use of the more innovative variables (R&D, design and information technologies) seems to be geared to price competitiveness.

One should then wonder whether this kind of policies is the “utmost good” for small businesses. We are somewhat uncertain as to giving a positive answer to this question. More precisely, we are doubtful about the exclusiveness of such good. Italian small enterprises seem to disappoint the expectations of those people who think that less conservative behaviours should be adopted in international competition.

References

- ACS Z.J., AUDRETSCH D.B. (1988), "Innovation in Large and Small Firms: an Empirical Analysis", *American Economic Review*, vol.78, n.4, pp. 678-690.
- AIT EL HADJ S., BIDAULT F. (1980), "L'insertion des PMI dans la Nouvelle Division Internationale du Travail", *Revue d'Economie Industrielle*, n. 46, pp. 55-71.
- AMIN A. (1989), "Specializzazione flessibile e piccole imprese in Italia: miti e realtà", *Piccola Impresa / Small Business*, vol. II, n. 3, pp. 27-53.
- ANDERSEN O. (1993), "On the Internationalization Process of Firms: A Critical Analysis", *Journal of International Business Studies*, vol.24, n. 2, pp. 209-231.
- BAMBERGER I. (1989), "Developing Competitive Advantage in Small and Medium-sized Firms", *Long Range Planning*, vol. 22, pp. 80 - 88.
- BARNEY J.B. (1991), "Firm Resources and Sustained Competitive Advantage", *Journal of Management*, vol. 17, pp. 99-120.
- BARNEY J.B. (1991), "Firm Resources and Sustained Competitive Advantage", *Journal of Management*, vol.17, pp.99-120.
- BARRON I., CURNOW R. (1979), *The Future with Microelectronics*, F. Pinter, London.
- BECATTINI G. (1979), "Dal "settore" industriale al "distretto" industriale. Alcune considerazioni sull'unità di indagine dell'economia industriale", *Rivista di economia e politica industriale*, vol. V, pp. 7-21.
- BECATTINI G. (1989), "Piccole e medie imprese e distretti industriali nel recente sviluppo italiano", *Note Economiche*, vol. IX, pp. 397-412.
- BESSANT C., LUI C.W.L. (1986), *Computer-aided Design and Manufacture*, Ellis Horwood, Sussex.
- BONACCORSI A. (1992), "On the Relationship between Firm Size and Export Intensity", *Journal of International Business Studies*, vol. 23, n. 4, pp.605-635.
- BRUSCO S., SABEL C. (1981), "Artisan Production and Economic Growth", in F. Wilkinson (a cura di), *The Dynamics of Labour Market Segmentation*, Academic Press, London.
- CAFFERATA R., MENSÌ R. (1995), "The Role of Information in the Internationalization of SMEs: A Typological Approach", *International Small Business Journal*, vol.13, n. 3, pp.35-46.
- CALOF J.L., BEAMISH P.W. (1994), "The Right Attitude for International Success", *Business Quarterly*, vol.59, pp.105-110.
- CALOF J.L., BEAMISH P.W. (1995), "Adapting to Foreign Markets: Exploring Internationalization", *International Business Review*, vol. 4, n. 2, pp. 115-131.

- CARLESI G. (1995), "Tecnologia, mercato dell'informazione e servizi per l'internazionalizzazione delle imprese", *Working Paper-PFI*, National Research Council, Rome.
- CAVUSGIL S.T. (1984), "Organizational Characteristics Associated with Export Activity", *Journal of Management Studies*, vol.21, n.1, pp.3-22.
- CHASE R.B. (1982), "The Customer Contact Approach to Services: Theoretical Base and Practical Extensions", *Operations Research*, vol.29, n.4, pp. 698-706.
- COVIN J.G., SLEVIN D.P. (1989), "Strategic Management of Small Firms in Hostile and Benign Environments", *Strategic Management Journal*, n.10, pp. 75-87.
- CRAIG R., BEAMISH P.W. (1989), "A Comparison of the Characteristics of Canadian and UK Exporters by Firm Size", *Journal of Global Marketing*, vol. 2, n. 4, pp.49-63.
- DI BERNARDO B., RULLANI E. (1990), *Il management e le macchine*, Il Mulino, Bologna.
- DICHTL E., KOEGLMAYR H.G., MUELLER S. (1990), "International Orientation as a Precondition For Export Success", *Journal of International Business Studies*, vol. 21, n. 1, pp. 23-40.
- DRUCKER P.L. (1990), "The Emerging Theory of Manufacturing", *Harvard Business Review*, vol.68, pp.94-102.
- EVANS J.S. (1991), "Strategic Flexibility for High-Technology Manoeuvres: A Conceptual Framework", *Journal of Management Studies*, vol.28, pp.69-89.
- FERRERO G.C. (1992), *Struttura, strategia e processi innovativi nelle piccole imprese*, Lint, Trieste.
- FREEMAN C. (1974), *The Economics of Industrial Innovation*, Harmondsworth, Penguin Books.
- FREY M. (1995), "Analisi delle applicazioni delle tecnologie dell'informazione nei processi di internazionalizzazione delle imprese", *Working Paper-PFI*, National Research Council, Rome.
- GAROFOLI G. (1989), "Industrial Districts: Structure and Transformation", *Economic Notes*, vol. 19, n. 1, pp. 37-54.
- GEISLER E. (1992), "Managing Information Technologies in Small Business: Some Practical Lessons and Guidelines", *Journal of General Management*, vol.18, n.1, pp. 74-81.
- GENCO P. (1995), "I servizi di supporto per l'internazionalizzazione: una politica per le piccole e medie imprese", *Persone & Imprese*, n.2.
- GHAURI P.N. (1987), "Global Marketing Strategies: Swedish Firms in South East Asia", in Varaldo R. (ed.), *International Marketing Cooperation*, ETS Editrice, Pisa.

- GRANDINETTI R., MICELLI S., RULLANI E. (1993), "L'internazionalizzazione incompiuta. Elementi per una politica dei servizi e delle reti", in CNR-PFI, *La Domanda di Servizi Reali per l'Internazionalizzazione delle Imprese: Esperienze Recenti e Specificità Locali*, National Research Council, Rome.
- GROENROOS C. (1988), "New Competition in the Service Economy: the Five Rules of Services", *International Journal of Operations and Production Management*, vol.8, n.3, pp.9-19.
- HOLMES S., KELLY G., CUNNINGHAM R. (1991), "The Small Firm Information Cycle: A Reappraisal", *International Small Business Journal*, vol. 9, n. 2, pp. 41-53.
- JOHANSON J., VAHLNE J.E. (1977), "The International Process of the Firm- A Model of Knowledge Development And Increasing Foreign Market Commitment", *Journal of International Business Studies*, vol. 8, n. 1, pp. 23-32.
- KAYNAK E., KOTHARI V. (1984), "Export Behaviour of Small and Medium-Sized Manufactures. Some Policy Guidelines for International Marketers", *Management International Review*, vol. 24, n. 2, pp. 61-69.
- KWON Y.C., HU M.Y. (1995), "Comparative Analysis of Export-oriented and Foreign Production-oriented Firms' Foreign Market Entry Decisions", *Management International Review*, vol.35, n.4, pp.325-336.
- LAZERSON M.H. (1988), "Organizational Growth of Small Firms: an Outcome of Markets and Hierarchies?", *American Sociological Review*, vol. 53, pp. 330-342.
- LEVITT T. (1972), "Production-Line Approach to Service", *Harvard Business Review*, vol.50, pp.41-53.
- MELE R. (1986), *L'esportazione per la piccola e media impresa*, Cedam, Padova.
- MILLINGTON A.I., BAYLISS B.T. (1990), "The Process of Internationalization: UK Companies in the EC", *Management International Review*, vol. 30, n. 1, pp. 151-161.
- MORGAN R.E., KATSIKEAS C.S. (1998), "Exporting Problems of Industrial Manufacturers", *Industrial Marketing Management*, vol. 27, n. 2, pp. 161-176.
- O'ROURKE A.D. (1985), "Differences in Exporting Practices, Attitudes and Problems by Size of Firm", *American Journal of Small Business*, vol. IX, n. 3, pp. 25-29.
- PECCI G., MARRIA G. (1979), *Piccole e medie imprese nel commercio internazionale*, Centro Studi Confindustria, Roma.
- PEPE C. (1984), *Lo sviluppo internazionale della piccola e media impresa*, F. Angeli, Milano.
- PEPE C. (1988), "Riflessioni sulla debolezza strategica delle piccole e medie imprese italiane", *Piccola Impresa/ Small Business*, vol.1, pp.41-60.

- PORTER M. (1985a), *The Competitive Advantage: Creating and Sustaining Superior Performance*, The Free Press, New York.
- PORTER M.E. (1985b), "Technology and Competitive Advantage", *Journal of Business Strategy*, vol.5, pp. 60-78.
- PRATTEN C. (1990), "Small Firms and the Economies of Scale", XIV Meeting organized by *L'Industria*, 28-29 September, Ancona.
- PYKE F., BECATTINI G., SENGENBERGER W. (eds.) (1990), *Industrial Districts and Inter-firm Co-operation in Italy*, Geneva, International Institute for Labour Studies.
- QUAGLIA F. (1996), "L'adozione delle tecnologie dell'informazione nelle piccole e medie imprese manifatturiere", *L'Industria*, vol.17, n.1, pp. 63-86.
- QUINN J.B. (1990), "Beyond Products: Services-Based Strategy", *Harvard Business Review*, vol.68, pp.58-67.
- RAINNE A. (1991), "Just-in-Time, Sub-Contracting and the Small Firm", *Work, Employment & Society*, vol.5, n.3, pp.353-375.
- RAYMOND L. (1992), "Computerisation as a Factor in the Development of Young Entrepreneurs", *International Small Business Journal*, vol.11, n.1, pp.23-34.
- ROSSON P.J., REID S.D. (1989), *Managing Export Entry and Expansion*, Praeger, New York.
- SANCHEZ R. (1995), "Strategic Flexibility in Product Competition", *Strategic Management Journal*, vol.16, pp.135-159.
- SCHLEGELMILCH B. (1986), "Controlling Country-Specific and Industry-Specific Influences on Export Behaviour", *European Journal of Marketing*, vol.20, n.2, pp.54-71.
- SCHWALBACH J. (1994), "Small Business Dynamics in Europe", *Small Business Economics*, vol.6, n.1, pp.21-25.
- SCOTT W.G. (1983), *L'internazionalizzazione dell'impresa minore*, Mediocredito Regionale Lombardo, Giuffrè, Milano.
- STEINMANN H., KUMAR B., WASNER A. (1980), "Conceptualizing the Internationalization Process of Medium-sized Firms: Some Preliminary Considerations for a Research Design", *Management International Review*, vol. 20, no.1, pp.50-66.
- SULLIVAN D., BAUERSCHMIDT A. (1990), "Incremental Internationalization: A Test of Johanson and Vahlne's Thesis", *Management International Review*, vol. 30, n. 1, pp. 48-64.
- VARALDO R. (1987), "The Internationalization of Small and Medium-Sized Italian Manufacturing Firms", in ROSSON P.J. E REID S.D., *Managing Export Entry and Expansion: Concepts and Practice*, New York: Praeger.

- VARALDO R. (Ed) (1987), *International Marketing Cooperation*, ETS Editrice, Pisa.
- VARALDO R., BELLINI N., BONACCORSI A., RICCABONI M. (1998), “Le diversità dell'industria italiana nella nuova integrazione economica internazionale”, *Economia e Politica Industriale*, vol.25, n.100, pp.7-43.
- VARALDO R., ROSSON J.P. (1992), *Profili gestionali delle imprese esportatrici*, G.Giappichelli, Torino.
- WELCH L.S., OLSON H.C., WIEDERSHEIM-PAUL F. (1978), “Pre-Export Activity: The First Step in Internationalization”, *Journal of International Business Studies*, vol. 9, pp. 47–58.
- WELCH, L.S., LUOSTARINEN, R.K. (1988), “Internationalization: Evolution of a Concept”, *Journal of General Management*, vol. 14, no.2, pp.36-64.

Tables

Table 1: Classification of SMEs according to the classes of employees (percentage division)

Classes of Employees	International Market Oriented Firms (IMO) (1)	Domestic Market Oriented Firms (DMO) (2)	Entire Sample
- up to 49	54,4	74,6	66,2
- from 50 to 99	30,7	16,5	22,4
- 100 and over	14,9	8,9	11,4
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

Table 2: Classification of SMEs according to sales (percentage division)

Classes of Sales (million of lire)	International Market Oriented Firms (IMO)(1)	Domestic Market Oriented Firms (DMO) (2)	Entire Sample
- up to 5,000	32,5	51,6	43,7
- from 5,001 to 10,000	27,0	26,0	26,4
- from 10,001 to 20,000	22,8	11,2	16,0
- more than 20,000	17,7	11,2	13,9
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

(1) The international market oriented firms (IMOs) are those with an export share of more than 20% of their sales.

(2) The domestic market oriented firms (DMOs) are those with an export share of less than 20% of their sales.

Table 3: Sales and Markets (percentage figures)

Percentage of Sales	International Market Oriented Firms (IMO)	Domestic Market Oriented Firms (DMO)	Entire Sample
Regional market			
- up to 25%	94,9	59,2	74,0
- from 26% to 50%	4,2	10,2	7,7
- from 51% to 100%	0,9	30,6	18,3
National market			
- up to 25%	23,3	24,3	23,9
- from 26% to 50%	34,4	9,2	19,7
- from 51% to 100%	42,3	66,4	56,5
Foreign market			
- up to 25%	23,3	100,0	68,2
- from 26% to 50%	37,2	0	15,4
- from 51% to 100%	39,5	0	16,4
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

Table 4: Ownership Control of the Firm (percentage figures)

Typology of Control	International Market Oriented Firms (IMO)	Domestic Market Oriented Firms (DMO)	Entire Sample
- SME controls other Italian firms	16,7	10,9	13,3
- SME controls foreign firms	6,5	1,7	3,7
- SME is controlled by Italian firms	12,1	17,2	15,1
- SME is controlled by foreign firms	4,7	2,6	3,5
- No ties	66,0	70,6	68,7
No data	0,9	1,3	1,2
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

Table 5: Typology of Interfirm Cooperation (percentage figures)

Typology of Interfirm Cooperation	International Market Oriented Firms (IMO)	Domestic Market Oriented Firms (DMO)	Entire Sample
- Finance	18,6	17,4	17,9
- Distribution	21,9	14,5	17,5
- Procurement	9,3	9,9	9,6
- Production	14,0	12,2	12,9
- R&D and design	9,3	6,6	7,7
- No cooperation	0,9	2,6	1,9
No data	68,8	73,0	71,3
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

Table 6: Relative Importance of SMEs' Functional Areas (percentage figures)

Functions	International Market Oriented Firms (IMO)	Domestic Market Oriented Firms (DMO)	Entire Sample
Production			
- Minimum	16,3	15,5	15,8
- Maximum	83,3	82,9	83,0
No data	0,5	1,6	1,2
Marketing			
- Minimum	24,2	36,2	31,2
- Maximum	74,4	61,2	66,7
No data	1,4	2,6	2,1
Procurement			
- Minimum	34,9	37,5	36,4
- Maximum	63,7	60,9	62,0
No data	1,4	1,6	1,5
R&D and design			
- Minimum	35,3	56,3	47,6
- Maximum	63,3	40,1	49,7
No data	1,4	3,6	2,7
Finance			
- Minimum	40,5	41,8	41,2
- Maximum	56,7	54,6	55,5
No data	2,8	3,6	3,3
Information systems			
- Minimum	57,2	60,9	59,3
- Maximum	38,6	35,9	37,0
No data	4,2	3,3	3,7
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

Table 7: Utilization of Advanced Technology for Production (percentage figures)

Production Technology	International Market Oriented Firms (IMO)	Domestic Market Oriented Firms (DMO)	Entire Sample
- Numerical Control Machines	34,0	29,3	31,2
- Robots	18,1	9,9	13,3
- CAD Systems	38,1	22,0	28,7
No data	45,1	58,6	53,0
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

Table 8: Formal Planning & Control Systems According to Enterprise Functional Areas (percentage figures)

Functions	International Market Oriented Firms (IMO)	Domestic Market Oriented Firms (DMO)	Entire Sample
- Integrated Systems	29,8	21,1	24,7
- Finance	27,4	19,7	22,9
- Production	48,8	35,9	41,2
- Sales	40,9	22,4	30,1
- Procurement	39,1	22,4	29,3
- Others	5,1	3,3	4,0
No data	34,4	48,4	42,6
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

Table 9: Factors of Competition (percentage figures)

Factors	International Market Oriented Firms (IMO)	Domestic Market Oriented Firms (DMO)	Entire Sample
Price			
- Less important	30,2	20,1	24,3
- More important	66,0	76,3	72,1
No data	3,7	3,6	3,7
Innovation			
- Less important	73,0	83,2	79,0
- More important	22,3	12,5	16,6
No data	4,7	4,3	4,4
Quality			
- Less important	62,3	72,1	68,0
- More important	34,4	24,3	28,5
No data	3,3	3,6	3,5
Differentiation policies (directed to customers)			
- Less important	59,5	71,4	66,5
- More important	34,5	20,4	26,2
No data	6,0	8,2	7,3
Differentiation policies (directed to distributors)			
- Less important	69,8	76,0	73,4
- More important	23,2	15,8	18,9
No data	7,0	8,2	7,7
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

Table 10: Non-price Factors of Competition of SMEs Operating in International Markets (IMOs Vs. DMOs)

Factors	International Market Oriented Firms (IMO)	Domestic Market Oriented Firms (DMO)	Entire Sample
Relations with commercial intermediaries	23,7	16,1	19,3
Relations with important customers	34,4	43,4	39,7
Product features	15,8	14,5	15,0
Customer service	51,6	45,1	47,8
Product innovation	19,5	9,5	13,7
Technological flexibility	21,4	4,9	11,8
Organizational efficiency	16,7	10,5	13,1
Advanced equipments	27,0	34,2	31,2
No data	0	0,3	0,2
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

Table 11: Non-price Factors of Competition of SMEs operating in the International Market, IMOs vs. DMOs (percentage figures)

Factors	International Market Oriented Firms (IMO)	Domestic Market Oriented Firms (DMO)	Entire Sample
Relations with commercial intermediaries	16,7	24,7	21,4
Relations with important customers	27,4	12,2	18,5
Product features	36,3	18,1	25,6
Customer service	12,6	5,3	8,3
Product innovation	42,8	14,1	26,0
Technological flexibility	8,8	11,8	10,6
Organizational efficiency	27,9	15,1	20,4
Advanced equipments	8,0	5,3	6,7
No data	0	0,3	0,2
<i>Reference basis</i>	<i>215</i>	<i>304</i>	<i>519</i>

Table 12: Index of Statistical Significance (chi square) of the Competitive Behaviour of IMO's in Comparison with DMO's

	Pearson's Chi Square Test	Sig. (*)	Pearson's Chi Square Test	Sig. (*)
Competitive factors				
Price	12,64	0,00		
Product innovation	53,69	0,00		
Customer Service	8,81	0,00		
Other factors of product differentiation	1,20	0,27		
Sources of competitive advantage			Information technology	
<i>Functions:</i>			Data collection	2,13 0,14
R&D and design	27,41	0,00	Word processing	6,20 0,43
Marketing	27,77	0,06	General accounting	0,95 0,75
Information Technology	0,81	0,66	Financial management	7,11 0,00
Production	1,57	0,45	Purchase order management	0,10 0,74
Finance	0,41	0,81	Communication System	0,48 0,52
Personnel management	1,54	0,46	Production planning and management	4,37 0,36
Purchases	0,45	0,79	Industrial Accounting	8,21 0,00
Administration	1,62	0,44	Interfunctional integration	4,23 0,39
Planning and control of:			External resources:	
Total system	5,14	0,02	Marketing advice	5,64 0,04
Financial flows	4,23	0,03	Financial advice	6,35 0,03
Production	8,75	0,00	Product design advice	18,50 0,00
Sales	20,63	0,00	Organizational advice	1,54 0,21
Procurement	16,93	0,00	Production and Logistics advice	0,01 0,91
Other	1,08	0,29	Information technology advice	1,70 0,19

ISBN 978-88-386-6656-8



9 788838 666560