
Export strategies as a factor of SME growth in Croatia

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Abstract: The paper explores the main processes and determinants of the internationalisation of the Small- and Medium-sized Enterprises (SMEs) in Croatia and empirically explores the data generated through the SME Exporters Survey covering the period between 1999 and 2004. The paper is based on a micro-level analysis, focusing on the characteristics of particular SMEs and entrepreneurs/managers who have achieved strong growth in terms of revenues and exports. When analysing the SMEs' growth strategies, the existing research often tends to emphasise factors such as innovativeness and export orientation, which is partly confirmed by the findings presented in the paper. The paper shows that the 'ideal type' of a Croatian export-oriented SME tends to operate in medium high-technology manufacturing and services, produce specialised capital and consumer goods servicing specific market niches, export independently, sell products directly to specialised customers of special products, cooperate with foreign enterprises, perform intramural Research and Development (R&D) activities, innovate product mix by including products with a higher value added and introduce new technologies, but without limiting their innovation activities on the acquisition of technology.

The appendices and details of the calculations used in this paper are available from the authors.

Keywords: export orientation; strategy; SME growth; innovation; Croatia.

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1 Introduction

The increasing importance of Small- and Medium-sized Enterprises (SMEs) in the global markets has spurred extensive research into the explanatory factors for cross-border expansion (Andersson, 2000; Chetty and Blackenburg-Holm, 2000; Chetty and Campbell-Hunt, 2003; Lloyd-Reason and Mughan, 2002; Babakus *et al.*, 2006). On the other hand, in developing or transition economies, it has been observed that SMEs do contribute to country exports (Neupert *et al.*, 2006), but the existing research does not seem to adequately explain SMEs' behaviour relating to internationalisation. Since the research data and analysis in this field are scarce (both nationally and regionally), there is a need both to accumulate evidence from different economic and institutional contexts and develop a research methodology. Therefore, this paper aims to initiate this process by exploring the patterns of internationalisation of export-oriented Croatian SMEs and its effects on enterprise growth.

The concept of internationalisation is defined as a process entailing coordinated activities undertaken by an enterprise to penetrate foreign markets or benefit from the resources originating from other markets (Szabo, 2002). Export/import activities and Foreign Direct Investments (FDIs) are the foundation of internationalisation. An internationalisation strategy entails actions undertaken by an enterprise in order to penetrate other markets or benefit from the products and/or services originating from other markets (cf. Smallbone *et al.*, 2002). The formulation and implementation of an optimal strategy of foreign market entry depends on a number of internal and external factors. SMEs are quite heterogeneous and operate in different product, labour and capital markets, as well as institutional and cultural environments. All of these influence their strategic behaviour, whose effectiveness is reflected in the pattern of enterprise growth.

The growth pattern of a particular enterprise is conditioned by the interaction of external and internal factors, including the characteristics of internationalisation itself. While external factors involve the opportunities and constraints faced by a particular SME, internal attributes (resources, capabilities, strategies) entail the forms and degrees of utilising specific entrepreneurial opportunities. The assumption is that the highest growth potential is possessed by SMEs whose strategy maximises the utilisation of opportunities and minimises the accompanying risks and costs.

The paper is based on a micro-level approach, *i.e.*, it focuses on the characteristics of particular SMEs in Croatia that have facilitated enterprise growth through internationalisation. The paper is organised as follows. In Section 2, a literature of SME internalisation and growth is reviewed, highlighting the observable gaps relating to transition economies. Section 3 outlines the methodological explanations concerning the definition of SME growth as a measure of the effectiveness of an overall strategy and in terms of the potential links with internationalisation. Section 4 provides an analysis of the survey of export-oriented SMEs in Croatia, examining the characteristics of the activities and strategies of these enterprises, including the characteristics of their exporting activities and the issues of technology, innovation and marketing. In addition, selected socioeconomic characteristics of the interviewees are analysed, as the influence of entrepreneurs and managers on the organisational processes, culture and competitive strategy of SMEs tends to be significant (especially in the early stages of enterprise development). Finally, some concluding remarks are presented in Section 5.

2 Literature review

2.1 Small- and medium-sized enterprises, internationalisation and growth

Over the last few decades, the internationalisation of SME activities has been gaining momentum due to the reduced costs and increased efficiency of multinational exchange (cf. Oviatt and McDougall, 1994; Saarenketo *et al.*, 2004). Consequently, the SMEs which have internationalised their activities beyond country borders have gained importance in international business; they are no longer a novelty, but a fact (Lu and Beamish, 2006). Internationalisation enables SMEs to develop competencies and acquire resources. The generation of significant exports indicates firm competitiveness and facilitates growth aspirations which, in turn, facilitate enterprise growth (cf. Demirgüç-Kunt and Maksimovic, 1998).

Over time, researchers have developed models of firm behaviour in relation to internationalisation (Johansson and Vahlne, 1977; Dunning, 1980; Oviatt and McDougall, 1994; Hennart, 2001; Larimo, 2007). While the benefits of internationalisation as a factor of SME growth are widely accepted (Lu and Beamish, 2006), the factors influencing this strategic choice are less evident. An SME's internationalisation strategy should be viewed in relation to the firm's overall behaviour and strategy (Andersson, 2000); it is mostly an 'emergent strategy' whose formulation tends to be less structured and formalised than in larger organisations (cf. Sainidis *et al.*, 2001). The key constructs that motivate a firm's internationalisation process include managerial factors, firm factors and environmental factors (Mtigwe, 2005). The majority of the research focuses on firm characteristics, trying to encompass a wider range of factors as well as the development dynamics (Nummela *et al.*, 2006). According to De Toni and Nassimbeni (2001), the factors distinguishing between exporters and nonexporters include firm size (connected to structural solidity and adequate financial resources) and age (related to experience and the level of consolidation within the organisation). Larimo (2007) found that the export performance is positively correlated with firm size, product and service quality, international orientation and market diversification. Some theorists, however, argue that the behaviour of the small firm,

including its internationalisation strategy, depends mostly upon entrepreneurs and their competences (Oviatt and McDougall, 1994; Lautanen, 2000; Lloyd-Reason and Mughan, 2002).

Firms internationalise in various dimensions and varying degrees. In order to analyse their internationalisation strategy, Luostarinen (1979) modified Ansoff's product-market concept of strategic decision-making that is related to firm growth by incorporating a third dimension (the mode of operation) and widening the product dimension.¹ Johanson and Vahlne (1977) focused on the acquisition of knowledge that leads to a growing commitment to and networking capability in international markets. Root (1994) distinguished between the export, contractual and investment entry modes. There have been attempts to define strategic composites for SMEs and their export strategies and, thus, define specific types of exporters on the basis of empirical evidence from several countries, notably by Stewart and McAuley (1999; 2000), who performed cluster analysis of the data on SMEs from the UK and Canada. Although there are some similarities between the analysed SME populations, there is no evidence that a stable taxonomy can be reached and proven empirically applicable across different SME populations. This multilayered complexity of the factors and strategies of SME internationalisation is particularly observable in transition countries, for which few studies exist.

2.2 The internationalisation and growth of small- and medium-sized enterprises in transition countries and Croatia

SMEs in transition economies are operating in environments with changing institutional and economic structures. Moreover, the integration of the European and global markets and the accession of post-communist countries into the European Union (EU) has been both a challenge and an opportunity. An enlarged economic area entails a more complex and dynamic environment (cf. Szabo, 2002). Both the contextual characteristics related to internationalisation and the extent to which they change influence SME strategies in the transition countries (cf. Tesfom and Lutz, 2006). Internationalisation implies various risks for SMEs and requires additional resources which may not be easily obtainable. As the research outlined so far suggests, the generalisation of the factors influencing SME internationalisation has not yielded a universal theoretical agreement. The complexity of SME internationalisation in the transition environment and the exploratory stage of its understanding are reflected in the prevalence of case studies and a limited number of comparative studies, which have so far identified few stylised facts. There have been several attempts by authors to identify the motivations of the firms in developing or transition countries to seek foreign markets and the internal and external triggers that facilitate internationalisation (cf. Smallbone *et al.*, 1998; Lloyd-Reason *et al.*, 2004; Wattanapruttipaisan, 2005). The ability of the SMEs in transition economies to compete in foreign markets varies between sectors and countries; the strategies of the emerging SMEs which have achieved short-term competitiveness may contain weaknesses that may affect their exports in the longer term (Smallbone *et al.*, 1998). This is further substantiated by Lloyd-Reason *et al.* (2004), who investigated how the entrepreneurs heading SMEs in Bulgaria, Czech Republic, Hungary and Romania cope with internationalisation. The identified key problems included a lack of appropriate financial instruments, problems with market intelligence and market access, a lack of professionalism within the business support infrastructure and poorly developed

management skills within the organisations. Furthermore, weak SME innovation performance² is among the crucial deficits of transition and post-transition economies in relation to the developed ones.

In Croatia, exporting is the prevailing mode of entry into foreign markets, with other entry modes existing only sporadically; when subsidiaries exist, they also predominantly serve as export vehicles. The internationalisation of Croatian SMEs has so far been tackled only tangentially, with very little data available for further research. Even effective SMEs are rarely able to achieve economies of scale; they are more likely to employ generic strategies based on differentiation and/or focus by exporting and developing specific products and/or products that serve specific customers or market niches, where the presence of innovative products is required (Račić, 2006). A survey of the innovation activities in Croatian enterprises has demonstrated that the share of innovative enterprises rises with the level of technology, as well as with the growth of the enterprises in size (Račić *et al.*, 2005). As for the relevance of innovation activities to firm growth, it has been found that a difference between innovative and non-innovative firms is related to the rise in exports and the rise in total revenues.³ Since changes in total revenues can measure firm growth, the link between innovation activities and growth via innovation propensity has been acknowledged.⁴ Using the Probit = probability unit model, Aralica *et al.* (2005) have modelled the innovation propensity in Croatian enterprises and found a statistical significance of the orientation of the firms to international markets and of the share of foreign capital. Export orientation via penetration of new markets or the introduction of new products in existing markets gives strong incentives to innovation processes.

3 Methodological remarks

The literature review suggests that SME internationalisation in transition countries (in general) and Croatia (in particular) is still quite underresearched. The research objective of the paper is to reduce that gap by exploring the patterns of internationalisation of the export-oriented Croatian SMEs and its effects on enterprise growth. In order to achieve this, the differences between high-growth and low-growth enterprises were analysed in terms of their industry affiliation, export characteristics, technology, innovation and marketing and the characteristics of their entrepreneurs/managers. Based on the literature, it is expected that high-growth enterprises will be more likely to belong to medium-high and high-technology industries, innovate more frequently (by introducing new products, technologies and marketing methods) and export products with a higher value added.

The methodology revolves around outlining specific features of the export strategies of high-growth SMEs. In order to do so, we need to define growth first. The basic dimensions for defining the size and tracking the growth of enterprises are revenues and the number of employees. Even though an analysis of the revenues is essential for comparisons of the size and growth of particular SMEs and sectors over time, this variable has relatively limited use in international comparisons due to differences in the price levels across countries and the corresponding impossibility to standardise the measures of enterprise size. Consequently, the number of employees tends to be a more reliable indicator, regardless of the differences in technologies and the organisation of enterprises and sectors that lead to pronounced variations in the degree of correlation between the growth of total revenues and employment.

High-growth enterprises are defined as those that achieve continuous, significant and often outstandingly rapid increases in total revenues and/or the number of employees, as well as other indicators of growth such as total assets and profits (cf. McMahon *et al.*, 1993). Export orientation, measured by the total revenues from exports and the share of the revenues generated in foreign markets in total revenues, is an additional measurement of growth applicable to enterprises in internationally tradable sectors. Enterprise growth is a risky process that demands the long-term and systematic efforts of entrepreneurs and employees, as well as a supportive environment. Even in such circumstances, the SMEs that achieve high growth are rather rare. Therefore, the recognition, development and support of enterprises with growth potential are crucial issues for economic and development policy.

Our empirical analysis is based on a survey of the largest exporters in the Croatian SME sector. The survey took place in April and May 2005 and consisted of four sections. They included basic information about the entrepreneurs and the firm, the characteristics of the firm's environment (including its markets), firm organisation, Research and Development (R&D) and innovation activities and more detailed information about the entrepreneurs themselves. The questionnaire design included the recommendations of local experts specialising in SME research. The questionnaire was distributed to 535 SMEs that are included in the Croatian Export Directory, a database of the Croatian Chamber of Commerce. The survey itself has been completed by poll takers, who were supervised by members of the research team.

In 2002, this (first ever) database of the 1449 largest Croatian exporters was created using data from the Croatian Customs Bureau. In 2003, the database was updated. A total of 733 regularly exporting enterprises were identified; 535 of them were small and medium-sized companies. For the purpose of our research, the questionnaires were sent to all 535 SMEs, 262 of which returned valid questionnaires; the response rate was, thus, 49.0%. The responding companies in the survey were divided into high-growth and low-growth groups in order to analyse their differences.⁵ Enterprise growth was represented using two criteria: the total revenues growth and employment growth. This is similar to the approach used by McMahon (2001),⁶ but instead of measuring the annual enterprise growth, due to data scarcity (available for 1999 and 2004 only), the enterprise growth rate is the average of that in the period of 1999–2004. The group of high-growth SMEs is defined through the above-average increase of their total revenues, whilst at least minimal employment growth⁷ is achieved in the observed period (1999–2004). The following criteria are used for the identification of the SMEs with high-growth performance:

- the above-average real growth (more than 38%) of the total revenues in 2004, in comparison to 1999
- the increase in the number of employees in 2004, in comparison to 1999.

The nominal growth rate of the total revenues (58%) was subtracted by the producer price index in the period of 1999 to 2004 (19.3%), resulting in a 38% real growth rate of the total revenues; the average annual growth rate was 7.6%. This would normally place them in the category of capped-growth SMEs (cf. McMahon, 2001). However, due to a relatively unfavourable business environment, they were considered sufficiently propulsive to be considered as high-growth export-oriented SMEs. The profitability criterion was not used because of its unreliability. Profits are often

minimised by entrepreneurs burdening their companies with private expenditures (to minimise corporate tax) and/or by the depreciation of investments which are necessary for intensive growth.

The increasing number of employees indicates enterprise growth because it arguably occurs after the firm reacts to the increasing volume of business by maximising its productivity at the current employment level and/or when management expects an increasing volume of business and hires new employees to handle it. Considering the possibility of unstable patterns regarding the number of employees in the analysed companies, the growth requirement is simplified to the level of net increase of the number of employees. Out of the sample of 262 enterprises, 137 belong to the high-growth group.

4 The export activities of small- and medium-sized enterprises in Croatia

This section explores the crucial attributes of export-oriented SMEs, as well as selected characteristics of the respondents (entrepreneurs and managers). The key aspects of the export strategies of high-growth firms are considered as factors that have most likely facilitated their growth. In addition to industry affiliation, the attributes of export activities are analysed, followed by the issues of technology, innovation and marketing. Finally, some of the attributes of the entrepreneurs and managers are considered. The statistical significance of the difference between the high-growth SME group and the other SMEs is tested using a chi-square test.

4.1 Industry affiliation

The shares of high-growth and low-growth enterprises in specific Nomenclature Generale des Activites Economiques dans l'Union Europeenne (General Industrial Classification of Economic Activities in the European Union) (NACE) sectors are shown in Table 1. The differences in the overall shares of specific sectors in the sample and in the growth groups (*i.e.*, high-growth SMEs and low-growth SMEs) in these sectors can be observed. Other manufacturing sectors (in which low-technology sectors predominate)⁹ and the manufacture of metal products account for the largest shares in the sample (25.2% and 19.5, respectively); the enterprises in the former sector demonstrate a weak growth performance, whereas the SMEs belonging to the latter sector show a strong growth capability. Overall, the best growth performance tends to be observed within the manufacture of metal products (belonging to medium high-technology manufacturing) and service sectors (construction and financial intermediation). The chi-square value (31.065) confirms the differences among the observed groups of SMEs, which are also statistically significant ($p = 0.013$).

The comparison of SME performance in the selected sectors (Table 1) and the real growth of the Gross Value Added (GVA)¹¹ in the corresponding sectors in the period between 1999–2004 (Table 2) shows a high degree of correspondence between the micro-level and macro-level data. The sectors which have the highest share of high-growth SMEs (construction, financial intermediation and the manufacture of metal products) also display the highest contributions to GVA growth. The GVA increase in the observed sectors was substantially higher (*i.e.*, financial intermediation increased by

94.2%, construction increased by 93.3% and the manufacture of fabricated metal products increased by 93.3%¹²) in comparison to the total GVA increase (56.1%) in the period of 1999–2004.

Table 1 The sectoral breakdown of small and medium-sized enterprises⁸

<i>Sectors</i>	<i>Shares of groups of SMEs</i>		<i>Share in total number of SMEs (%)</i>
	<i>High-growth SMEs (%)</i>	<i>Low-growth SMEs (%)</i>	
Agriculture, hunting and forestry	4.4	4.0	4.2
Manufacture of food products and beverages	5.1	6.4	5.7
Manufacture of wood and products of wood	8.8	9.6	9.2
Manufacture of paper and paper products	2.2	5.6	3.8
Manufacture of rubber and plastic products	7.3	8.8	8.0
Manufacture of basic metals and fabricated metal products	27.7	10.4	19.5
Manufacture of machinery and equipment	10.9	12.0	11.5
Other manufacturing ⁹	18.2	32.8	25.2
Construction	7.3	4.0	5.7
Financial intermediation	6.6	0.8	3.8
Other services ¹⁰	1.5	5.6	3.4

Table 2 The contribution to the real growth of the gross value added of the selected sectors¹³ and the gross value added sectoral percentage change, 1999–2004

<i>Sector</i>	<i>Contribution to GVA growth (%)</i>	<i>GVA sectoral percentage change (%)</i>
Agriculture, hunting and forestry	2.0	21.3
Manufacture of food products and beverages	2.0	52.0
Manufacture of wood and wood products	0.3	50.6
Manufacture of paper and paper products	0.9	55.0
Manufacture of rubber and plastic products	0.2	37.6
Manufacture of basic metals and fabricated metal products	1.1	93.3
Manufacture of machinery and equipment	0.4	55.0
Other manufacturing	4.8	37.6
Construction	5.0	93.3
Financial intermediation	4.5	94.2
Other services	9.6	55.0
Other sectors by NACE classification not presented in questionnaire ¹⁴	25.5	37.6
Total GVA	56.1	56.1

Sources: Authors' calculation, based on CBS (2007), CBS (2005) (see Appendix)

4.2 *Export characteristics*

In this section, we explore the characteristics of exported products, the prevailing distribution channels and the relative importance of exports and imports within the companies' business strategies. The analysis suggests that high-growth SMEs export relatively more capital-intensive goods and consumer durables. At the same time, low-growth SMEs are stronger as exporters of consumer goods. Given the more intense competition within the consumer goods market, such an orientation of the low-growth SMEs affects their performance. The chi-square test result is 2.847 and the differences among the observed groups of SMEs are not statistically significant ($p = 0.241$).

Table 3 The groups of small- and medium-sized enterprises and the types of exported products

<i>Main type of exported goods</i>	<i>Shares of groups of SMEs</i>		<i>Share in total SME number (%)</i>
	<i>High-growth SMEs (%)</i>	<i>Low-growth SMEs (%)</i>	
Capital-intensive goods and consumer durables	40.1	30.5	35.5
Consumer goods	39.4	47.7	43.4
Service goods and service together	20.4	21.9	21.1

The Croatian SME exporters reveal a high level of import dependence. High-growth SMEs tend to be even more dependent on imported inputs. It seems that the transfer of knowledge through the process of technology acquisition plays a significant role in achieving high growth. That could be positive only if it were a transition strategy of absorbing new technologies in order to enter more demanding markets. However, technological dependence and the incapability to acquire adequate inputs in the domestic market are more probable reasons of the pronounced import dependence of the high-growth SMEs. The chi-square test result (11.878) is statistically significant ($p = 0.008$).

Table 4 The groups of small- and medium-sized enterprises and the dependence of exports on imports

<i>The dependence of exports on imports</i>	<i>Shares of groups of SMEs</i>		<i>Share in total number of SMEs</i>
	<i>High-growth SMEs</i>	<i>Low-growth SMEs</i>	
Less than 25%	35.8	43.8	39.6
25%–50%	19.7	24.2	21.9
50%–75%	6.6	12.5	9.4
75%–100%	38.0	19.5	29.1

Regarding distribution channels, high-growth SMEs sell their products more often to specialised buyers, which implies more reliance on specialised products. At the same time, low-growth SMEs sell their goods more frequently to wholesalers, distributors and other intermediaries, with sales to the final users of consumer goods being the least frequent. This may be due to the incapability of the SME exporters to penetrate markets in which investments into marketing and distribution are crucial. The chi-square value (2.592) is not significant ($p = 0.628$).

Table 5 The groups of small- and medium-sized enterprises and the prevailing distribution channels

<i>Most frequent foreign buyers</i>	<i>Shares of groups of SMEs</i>		<i>Share in total number of SMEs (%)</i>
	<i>High-growth SMEs (%)</i>	<i>Low-growth SMEs (%)</i>	
Consumers	7.3	8.6	7.9
Specialised buyers	37.2	32.8	35.1
Retailers or intermediaries selling to final consumers	15.3	14.8	15.1
Wholesalers, distributors and other intermediaries not selling to final consumers	27.7	35.2	31.3
Others	12.4	8.6	10.6

Although there are some noticeable differences between the high-growth and low-growth SMEs, these differences only partially confirm the expectations regarding the sources of competitive advantages of the export-oriented SMEs. The result is a patchwork of semideveloped and fragmentarily implemented business models, which makes generalisations rather difficult.

4.3 *Technology, innovation and marketing*

When comparing high-growth SMEs and low growth SMEs in terms of their main economic activities, the most important differences are in the larger share of firms engaged in services and medium high-technology manufacturing among the high-growth SMEs.¹⁵ Higher shares of agriculture, food and other lower-technology manufacturing are frequently present among low-growth SMEs. The chi-square value yields 10.65 and high-growth SMEs demonstrate a statistically significant ($p = 0.014$) difference in the usage of demanding knowledge and technologies. Paradoxically, they dominate in the segment of undemanding knowledge and technologies as well, implying a segmentation of high-growth SMEs and their business strategies. Opportunities for growth in routine activities are created due to low competition.

The estimation of future investments in achieving business goals and activities emphasises the introduction of new technology and equipment. The differences between high-growth and low-growth SMEs are statistically significant ($p = 0.013$). However, the other side of introducing new technology and equipment is the corresponding neglect of R&D. Although imported technology is absorbed, it does not lay fertile ground for new innovations of products and processes and may as well induce import dependence (cf. Table 4).

When it comes to investing in R&D (measured by the share of total revenues invested in those activities) there are no significant differences between the two observed groups of SMEs. On the contrary, the results are the opposite in the case of the launching of completely new products onto the market. The chi-square value is 17.922; high-growth SMEs are more active in product innovation ($p = 0.000$). Unfortunately, those results confirm a weak relationship between product innovation and R&D activities, thereby leading to the insufficient technology capabilities of the Croatian SMEs.¹⁶

Table 6 The groups of small- and medium-sized enterprises and the predominant level of knowledge and technology used

<i>Level of knowledge and technology predominantly used</i>	<i>Shares of groups of SMEs</i>		<i>Share in total number of SMEs (%)</i>
	<i>High-growth SMEs (%)</i>	<i>Low-growth SMEs (%)</i>	
Mostly used basic technology	25.5	21.1	23.4
Partly used demanding technology	27.7	32.8	30.2
Mostly used demanding technology	33.6	43.0	38.1
Up-to-date technology is necessary for business	13.1	3.1	8.3

Table 7 The small- and medium-sized enterprise groups and number of new products in the last three years

<i>Number of new products launched in the last three years</i>	<i>Shares of groups of SMEs</i>		<i>Share in total number of SMEs (%)</i>
	<i>High-growth SMEs (%)</i>	<i>Low-growth SMEs (%)</i>	
No new products	40.9	34.4	37.7
From 1–3 products	14.6	36.7	25.3
From 4–10 products	24.8	16.4	20.8
11 and more products	19.7	12.5	16.2

Regarding marketing expenditures, high-growth SMEs are considerably more active ($p = 0.013$); the chi-square result is 12.697. Since marketing expenditures are obviously perceived as important, it might be assumed that part of the SMEs compensate for a low level of innovativeness with larger marketing expenditures.

Table 8 The groups of small- and medium-sized enterprises and marketing expenditures

<i>Share of marketing expenditures in total revenues</i>	<i>Shares of groups of SMEs</i>		<i>Share in total number of SMEs</i>
	<i>High-growth SMEs</i>	<i>Low-growth SMEs</i>	
Less than 1%	25.7	27.3	26.5
From 1.1% to 3%	21.3	19.5	20.5
From 3.1% to 5%	20.6	7.8	14.4
More than 5%	14.7	14.1	14.4
No expenditures/no answer	17.6	31.3	24.2

To summarise, although high-growth SMEs are relatively more active in using new technologies, product innovation and marketing expenditures, the overall innovation levels are insufficient, especially when the novelty levels of new products is taken into account. Consequently, even the high-growth SMEs require a significant upgrade of their technology capability and, especially, R&D activities.

4.4 *The attributes of entrepreneurs and managers*

The characteristics of an enterprise have a crucial influence on the patterns of its growth and are mostly treated as exogenous explanatory variables regarding growth, development and organisational changes in general. Nevertheless, the characteristics of enterprises stem from the interaction of agents within the organisation in the context of specific environmental conditions and trends. Therefore, the analysis of attitudes, behaviours and socioeconomic characteristics of entrepreneurs and managers can corroborate and complement the undertaken analysis of the high-growth SMEs in Croatia.

The interviewees from the high-growth SMEs have, on average, a lower level of formal education and a smaller share of graduates with nonbusiness backgrounds (the shares of business graduates are similar).¹⁷ When it comes to work experience up to 1988 (*i.e.*, the starting position prior to transition), the main difference between the groups is a larger share of former workers and (especially) craftsmen in high-growth SMEs, as opposed to a smaller share of former top managers: the entrepreneurial experience within the crafts systems seems to have been proven more valuable than a managerial career during socialism.¹⁸ These managers' lack of success in adapting to the new situation affected the growth pattern of the companies they have managed ($p = 0.035$). The issue of willingness to quit their jobs in the near future presents a clear and significant ($p = 0.011$) point of distinction between the interviewees from the two groups of SMEs: although most of them are planning to stay within their companies, the respondents from high-growth companies do so more strongly. Investments into business ventures and their success seem to be highly motivating for continued engagement. An alternative interpretation, especially for low-growth SMEs, may be explained by an aversion to change. As far as management style is concerned, the interviewees from both groups of SMEs show a high degree of correspondence. However, the interviewees from high-growth SMEs show some statistically significant differences because of their increased readiness to look after the welfare of their employees, shareholders and customers, a stronger tendency to control subordinated employees, a firm belief in strong leadership and less of the need to rely on the support of influential people to succeed.

The attitudes stated above allow us to assume that the more successful entrepreneurs and managers prefer 'enlightened paternalism' as an optimal style for managing a company. In doing so, the emphasis is on strong leadership and control on one hand and on a benevolent approach towards the employees and other key stakeholders on the other. A lower degree of reliance on the support of influential people can be interpreted as a lower tendency towards corruption, which would be in line with the expressed attitudes on corporate social responsibility.

5 **Conclusion**

The SMEs with high growth performance and potentials are quite heterogeneous. Moreover, a complex and unstable economic and social environment amplifies the differences in the capabilities, risk factors, cost structures and opportunities of particular enterprises to generate profits. Therefore, the enterprises with more ambitious business strategies based on export orientation, innovation and higher competitiveness standards

may be burdened by higher risks and costs. However, institutional imperfections and market fluctuations create opportunities in areas where in developed markets, competitive pressures have already reduced profit margins and constrained rapid growth.

To sum up, the Croatian export-oriented SMEs with the strongest growth performances are more likely to:

- operate in medium high-technology manufacturing groups (the manufacture of metal products) and services sectors
- produce specialised capital and consumer goods servicing specific market niches
- export independently
- sell products directly to specialised customers of special products
- form partnerships with foreign enterprises
- innovate product mix by including products with a higher value added
- undertake intramural R&D and/or cooperate in product development
- introduce new technologies without limiting their innovation activities to the acquisition of technology.

It should be noted that this is a description of the 'ideal type' of export-oriented SMEs in Croatia, which can be discerned on the basis of the analysed population. In reality, most of the high-growth SMEs demonstrate only some of these features. Such behaviour can be explained by the relatively high risks and costs of exclusive reliance on the 'ideal' business model, as well as on the opportunities offered by less demanding alternative business models. The high-growth enterprises analysed in this paper can contribute to the future development of higher value added activities in the manufacturing and service sectors in Croatia. However, they are unlikely to play such a role automatically, completely autonomously or on the basis of the current business strategies. Such SMEs should become one of the key target groups of enterprise policy, following the necessary improvement of the general conditions for entrepreneurship.¹⁹ Nowadays, the level of entrepreneurial activities and competitiveness of the economy in general, as well as particular sectors, does not provide the fertile ground for a rapid increase in competitiveness and exports, which would be a foundation for enterprise growth. As this paper indicates, there is a link between SME growth and above average real GVA growth rates in particular sectors, including financial intermediation, construction and the manufacture of metal products.

The need to adapt to regional and European markets is expected to facilitate organic growth and strengthen the export performance of the analysed high-growth SMEs. Hence, stronger growth can be limited by several factors. On one hand, there is a risk of suboptimally managing growing enterprises due to a relative conservative approach employed by entrepreneurs. Most of the analysed high-growth SMEs are owned by a single entrepreneur (or groups of entrepreneurs) who have recognised a business opportunity. Moreover, they tend to be managed in the style of enlightened paternalism. This is understandable, given the prevailing cultural norms and entrepreneurial climate during transition. However, it is questionable whether such ownership structures and such a management approach are suitable anymore. If the aspiration to preserve control over the enterprise prevails over optimal growth strategies, that can result in obstacles to the

restructuring and mergers/acquisitions of companies, as well as in a decreased interest on the part of external investors. The second potential obstacle to further SME growth may be low innovation levels, especially in the case of radical innovation and complex products and services. Although investments in new technologies are increasing, the expenditures on the R&D, design and marketing of new complex products and services are insufficient. Given the limited resources that most SMEs possess, this can be achieved primarily through stronger collaboration within clusters or industrial networks.

Further research should involve longitudinal studies (in order to observe the sustainability of the observed growth performance) and more complex definitions of enterprise growth (including the further use of growth rates in specific sectors to control for the external differences faced by enterprises, *e.g.*, an increase in the government expenditures on public infrastructures present an larger opportunity for SMEs growth in the construction sector, in comparison to the SMEs in other sectors). It would also be useful to improve the methodology by strengthening the linkages between the characteristics of entrepreneurs and firms. Finally, comparative studies covering several transition economies (preferably grouped according to development levels and/or institutional features) would also help in extending the relevance of the findings.

References

- Andersson, S. (2000) 'The internationalization of the firm from an entrepreneurial perspective', *International Studies of Management and Organization*, Vol. 30, No. 1, pp.63–93.
- Aralica, Z., Račić, D. and Radić, D. (2005) *Innovation Propensity in Croatian Enterprises: Results of the Community Innovation Survey*, Global Development Network, http://www.cerge-ei.cz/pdf/gdn/RRCIV_104_paper_01.pdf.
- Babakus, E., Yavas, U. and Haahti, A. (2006) 'Perceived uncertainty, networking and export performance, a study of Nordic SMEs', *European Business Review*, Vol. 18, No. 1, pp.4–13.
- Central Bureau of Statistics (CBS) (2005) *Statistical Yearbook*, Zagreb.
- Central Bureau of Statistics (CBS) (2007) *Statistical Yearbook*, Zagreb.
- Central Bureau of Statistics (CBS) (2008) *Monthly Statistical Report*, Zagreb, Vol. XVII, No. 1.
- Chetty, S. and Blackenburg-Holm, D. (2000) 'Internationalisation of small to medium-sized manufacturing firms: a network approach', *International Business Review*, Vol. 9, No. 1, pp.77–93.
- Chetty, S. and Campbell-Hunt, C. (2003) 'Paths to internationalization among small- to medium-sized firms a global versus regional approach', *European Journal of Marketing*, Vol. 37, Nos. 5–6, pp.796–820.
- Demirgüç-Kunt, A. and Maksimovic, V. (1998) 'Law, finance, and firm growth', *Journal of Finance*, Vol. 53, pp.2107–2137.
- De Toni, A. and Nassimbeni, G. (2001) 'The export propensity of small firms, a comparison of organizational and operational management levers in exporting and non-exporting units', *International Journal of Entrepreneurial Behaviour and Research*, Vol. 7, No. 4, pp.132–147.
- Dunning, J.H. (1980) 'Toward an eclectic theory of international production: some empirical tests', *Journal of International Business Studies*, Vol. 11, Spring/Summer, pp.9–31.
- GEM (2006) *What Makes Croatia An Entrepreneurial Country?: GEM 2002–2005 Results for Croatia*, Zagreb: CEPOR.
- Hennart, J-F. (2001) 'Theories of the multinational enterprise', in A.M. Rugman and L.B. Thomas (Eds.) *The Oxford Handbook of International Business*, Oxford, UK: Oxford University Press.

- Johansson, J. and Vahlne, J.E. (1977) 'The internationalization process of the firm: a model of knowledge development and increasing foreign market commitments', *Journal International Business Studies*, Vol. 8, No. 1, pp.23–32.
- Larimo, J. (2007) 'International joint venture performance: impact of performance measures and foreign parent, target country and investment specific variables on performance', in G. Cliquet, G. Hendrikse, M. Tuunanen and J. Windsperger (Eds.) *Economics and Management of Networks: Franchising, Strategic Alliances, and Cooperatives*, Heidelberg: Springer/Physica-Verlag, pp.393–418.
- Lautanen, T. (2000) 'Modelling small firms' decisions to export – evidence from manufacturing firms in Finland, 1995', *Small Business Economics*, Vol. 14, No. 2, pp.107–124.
- Lloyd-Reason, L., Damyanov, A., Nicolescu, O. and Wall, S. (2004) *Internationalisation Process, SMEs and Transitional Economies: A Four-Country Perspective*, Centre for International Business Research, Anglia Polytechnic University, Cambridge, http://web.anglia.ac.uk/aibs/cib/CIB_publications/CIB_Paper3.pdf.
- Lloyd-Reason, L. and Mughan, T. (2002) 'Strategies for internationalization within SMEs: the key role of the owner-manager', *Journal of Small Business and Enterprise Development*, Vol. 9, No. 2, pp.120–129.
- Lu, J. and Beamish, P. (2006) 'SME internationalization and performance: growth vs. profitability', *Journal of International Entrepreneurship*, Vol. 4, No. 1, pp.27–48.
- Luostarinen, R. (1979) 'Internationalization of the firm: an empirical study of the internationalization of the firms with small and open domestic markets with special emphasis on lateral rigidity as a behavioural characteristic in strategic decision making', Doctoral dissertation, Helsinki: Helsinki School of Economics.
- McMahon, R.G.P. (2001) 'Deriving an empirical development taxonomy for manufacturing SMEs using data from Australia's business longitudinal survey', *Small Business Economics*, Vol. 17, No. 3, pp.197–212.
- McMahon, R.G.P., Holmes, S., Hutchinson, P.J. and Forsaith, D. (1993) *Small Enterprise Financial Management: Theory and Practice*, Sydney: Harcourt Brace.
- Mtigwe, B. (2005) 'The entrepreneurial firm internationalization process in the Southern African context, a comparative approach', *International Journal of Entrepreneurial Behaviour and Research*, Vol. 11, No. 5, pp.358–377.
- Neupert, K.E., Baughn, C.C. and Dao, T.T.H. (2006) 'SME exporting challenges in transitional and developed economies', *Journal of Small Business and Enterprise Development*, Vol. 13, No. 4, pp.535–545.
- Nummela, N., Loane, S. and Bell, J. (2006) 'Change in SME internationalisation: an Irish perspective', *Journal of Small Business and Enterprise Development*, Vol. 13, No. 4, pp.562–583.
- OECD (1997) *Revision of the High Technology Product and Sector Classification*, Paris: OECD.
- Oviatt, B. and McDougall, P. (1994) 'Toward a theory of international new ventures', *Journal of International Business Studies*, Vol. 25, No. 1, pp.45–61.
- Račić, D. (2006) 'Odrednice rasta izvozno orijentiranih malih i srednjih poduzeća u Hrvatskoj', in D. Čengić (Ed.) *Izvojni potencijal hrvatskog malog gospodarstva*, Zagreb: The Ivo Pilar Institute of Social Sciences, pp.131–160.
- Račić, D., et al. (2005) *Innovation in Croatian Enterprises*, Project study, Zagreb: The Institute of Economics.
- Root, F.R. (1994) *Entry Strategies for International Markets*, New York: Lexington Books.
- Ruzzier, M. and Konečnik, M. (2006) 'The internationalization strategies of SMEs: the case of Slovenian hotel industry', *Management*, Vol. 11, pp.17–35.
- Saarenketo, S., Puumalainen, K., Kuivalainen, O. and Kyläheiko, K. (2004) 'Dynamic knowledge-related learning processes in internationalizing high-tech SMEs', *International Journal of Production Economics*, Vol. 89, No. 3, pp.363–378.

- Sainidis, E., Gill, R. and White, A. (2001) 'Emergent strategies in SMEs, manufacturing information systems', *Proceedings of the Fourth SMESME International Conference*.
- Smallbone, D., Baldock, R. and Burgess, S. (2002) 'Targeted support for high-growth startups: some policy issues', *Environment and Planning*, Vol. 20, No. 2, pp.195–209.
- Smallbone, D., Piasecki, B., Venesaar, U., Todorov, K. and Labrianidis, L. (1998) 'Internationalisation and SME development in transition economies: an international comparison', *Journal of Small Business and Enterprise Development*, Vol. 5, No. 4, pp.363–375.
- Stewart, D.B. and McAuley, A. (1999) 'Effects of export stimulation: implications for export performance', *Journal of Marketing Management*, Vol. 15, No. 6, pp.505–518.
- Stewart, D.B. and McAuley, A. (2000) 'Congruence of domestic and export marketing strategies: an empirical investigation of its performance implications', *International Marketing Review*, Vol. 17, No. 6, pp.563–585.
- Szabo, A. (2002) *Internationalisation of SMEs: The UNECE Approach*, <http://www.unecce.org/indust/sme/internat.htm>.
- Tesfom, G. and Lutz, C. (2006) 'A classification of export marketing problems of small and medium sized manufacturing firms in developing countries', *International Journal of Emerging Markets*, Vol. 1, No. 3, pp.262–281.
- Wattanaputtipaisan, T. (2005) 'SME development and internalization in the knowledge-based and innovation driven economy: mapping the agenda ahead', BEI Studies Unit Paper No. 09/2005, Jakarta: ASEAN Secretariat, <http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN024775.pdf>.

Notes

- 1 Ruzzier and Konečnik (2006) proposed to add time as a dimension of internationalisation. The traditional gradual entry into foreign markets is now often substituted by more rapid entry strategies.
- 2 Innovation is one of the basic attributes of SMEs with growth potential.
- 3 The former variable is defined as the rise in a firm's exports between 2001 and 2003. The latter variable denotes the rise in a firm's total revenues between 2001 and 2003. The exports increased almost two times more frequently within innovative firms (10.2%) than within non-innovative firms (5.7%) within the period of 2001–2003. The rise in the total revenues in innovative firms (21.7%) appeared less frequently than in non-innovative firms (30.7%) in the same period.
- 4 Innovation propensity measures the economic output of the innovation process. The share of sales of new products or services in a firm's total revenues indicates the economic relevance of innovation.
- 5 Except when noted otherwise, the differences between the two observed groups of SMEs are analysed with chi-square tests, to which 'statistical significance' thereby refers.
- 6 McMahon's cluster analysis of SMEs (2001) is based on the following variables: sales increase, enterprise growth (*i.e.*, annual employment growth and annual sales growth) and enterprise age.
- 7 Since the survey includes the leading Croatian exporters from the SME sectors that possess above average competences and generate above average performance, we use a simple measure of employment growth to discern the growing segment of SMEs.
- 8 The sector selection was made according to the classification in the questionnaire (Question 11). The questionnaire is provided in Appendix.

- 9 'Other manufacturing' includes the manufacture of textiles, leather and leather products, refined products, chemicals and chemical products, other nonmetallic mineral products, machinery and equipment, electrical and optical equipment, transport equipment and furniture and recycling.
- 10 'Other services' include hotels and restaurants and transport, storage and communication.
- 11 Total revenues (*i.e.*, the value on the firm level) and value added (*i.e.*, the value on the macro level) can be linked via *gross output*. For more information, see Appendix.
- 12 Sectoral GVA increases the rate; the details of this calculation are provided in Appendix.
- 13 The sectors in Table 2 are classified by the same sector classification as in Table 1.
- 14 Other industries that are not included in the questionnaire are fishing, mining and quarrying, electricity, gas and water supply, wholesale and retail trade, activities of households, other communities, social and personal service activities, real estate, renting and business activities, public administration and defence, compulsory social security, education and health and social work.
- 15 A classification of the manufacturing activities according to their technology levels can be found in OECD (1997).
- 16 The high percentage of non-innovators among the high-growth SMEs confirms that some exporters use routine technologies and simple product ranges to participate in foreign markets.
- 17 Although the low frequency of entrepreneurs with degrees in technical sciences seems rather surprising, that does not hinder successful entrepreneurship. On the other hand, technical science faculties do not provide their students with sufficient entrepreneurial skills.
- 18 Successful socialist managers were usually employees of larger companies.
- 19 When it comes to key enterprise policy measures, the reduction of administrative barriers and corruption and the wider availability of financing instruments, as well as education and services, seem to be among the priorities required to foster a larger and more competitive SME sector (cf. GEM, 2006).

Appendix

Gross output has an approximate value of total revenues in the national economy. The relationship between *gross output* and *total revenues* is problematic, because there is no unique way of linking these concepts. Moreover, the differences between *gross output* and *total revenues* appear on the sector level (NACE classification). *Gross output* is defined as a market value of the produced goods and services. *Gross output* minus *intermediate consumption* (i.e., the value of the goods and services that are transformed, used up or consumed in the production process) equals *Gross Value Added (GVA)*. GVA is a measure of the value of the goods and services produced in the economy by individual producer, industry and sector (CBS, 2007).

The proportions of GVA growth in the real sector were calculated in three steps:

- 1 The real value of GVA was calculated using the equation:

$$\text{Real GVA classified by the sectors} = \frac{\text{Nominal gross value added classified by the sectors}}{\text{GDP deflator}}. \quad (1)$$

The GVA in Table 2 is organised according to the sector classification found in the questionnaire (see Appendix, Question 11). The sectors are: agriculture, hunting and forestry, manufacture of food products and beverages, manufacture of wood and wood products, manufacture of paper and paper products, manufacture of rubber and plastic products, manufacture of fabricated metal products, manufacture of machinery and equipment, other manufacturing, construction, financial intermediation, other services, other industries not included in questionnaire and the total GVA (representing the national economy).

The *GDP deflator* measures the differences between the *real GVA* and the *nominal GVA*. The values are the authors' calculation based on CBS (2008). Since the link between GVA and GDP is defined as GVA (at current basic prices; available by industry only) plus taxes on products (available at the whole economy level only) less the subsidies on products (available at the whole economy level only) equals GDP (at current market prices; available at whole economy level only), we used the GDP deflator as a measure for deflation of the *nominal GVA* classified by the sectors classification.

- 2 The percentage change of the real GVA by sector was calculated.

$$\text{Percentage change of real GVA in the sector} = \frac{RGVA_{S,2004} - RGVA_{S,1999}}{RGVA_{S=total,1999}}, \quad (2)$$

where:

RGVA = Real Gross Value Added in the sector

S = the sectors (defined in the first step)

2004 and 1999 = years of observation.

- 3 All the percentage changes of the sector's (S) real GVA (Equation 2) in the period between 1999–2004 were summed.

The GVA sectoral percentage change was calculated by dividing the GVA sector value (financial intermediation, construction and the manufacture of metal products) in 2004 and 1999. The indexed value was subtracted by 100, resulting in the sectoral GVA rate of increase:

$$I_s = \frac{GVA_{S,2004}}{GVA_{S,1999}} 100; S_s^* = I_s - 100,$$

where:

GVA = Gross Value Added in the sector

S = the sectors (financial intermediation, construction and the manufacture of metal products)

I_s = Indexed sectoral value

S_s^* = Sectoral GVA rate of change.