DERIVING INTERNATIONAL COMPETITIVE ADVANTAGE IN SMES THROUGH PRODUCT-MARKET AND BUSINESS SYSTEM RESOURCE ALLOCATION

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Introduction

Expanding into international markets is often used by companies seeking rapid growth. Policy makers advocate the development of export markets for national macroeconomic reasons. In their study of fast-growth businesses in the UK, Storey *et al* (1989) report that one of the main characteristics that distinguishes growth companies is the importance of exports in their sales. The need to internationalise to grow is all the more acute in the case of small open economies because of the limited size of the domestic market (O'Grady, 1987). In many countries only a small number of indigenous smaller companies (SMEs) have succeeded in establishing a significant presence in export markets, leaving the endeavour to the subsidiaries of mobile multinationals or the larger well-endowed indigeneous enterprises. Many SMEs, however, have been successful in international markets and researchers have examined aspects of their success but little attention has been given in the literature to the approaches adopted by successful SMEs to initially establish themselves in international markets or to the policies they follow to achieve the critical mass required for company growth through internationalisation. This paper concentrates on examining how successful exporting companies allocate resources to international product-markets and how extensively they participate in the business system.

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The principal suggestion in the literature is that concentration on selected products and markets is the route to success for SMEs. Concentration on selected products and markets is concerned with the company's marketing strategy and the appropriate resource allocation between the two. This is a choice between diversification and concentration (Ayal and Zif, 1979). Diversification implies a rapid penetration of a large number of product-markets and diffusion of effort among them whereas concentration means devoting resources to a few product-markets with possible subsequent expansion into new areas. Concentration allows attractive markets to be targeted and resources to be focused initially on these markets only. The first international market entered may serve as a bridgehead both for diversification into other markets and for launching other products internationally (Bradley and Gannon, 2000).

Because companies operate within a business system and because markets are characterised by competition between business systems as much as between individual companies (Bradley 1999, p. 50-55), it is also important to consider the critical cost areas of the business. Underlying this proposition is the assumption that a source of competitive advantage may be found by reorganising the business system to complement the firm's marketing strategy. The objective of such reorganisation would be to achieve a superior cost-quality combination in a way that makes it difficult for larger competitors to emulate. The argument to be tested is that the key to competitive advantage is to avail of the flexibility that SMEs seem to enjoy in unbundling the business system so as to focus on those elements of the value-added chain in the business system that yield the greatest return while rearranging the provision of the other elements as cost-effectively as possible.

Product-Market Resource Allocation

The resource allocation decision determines the distribution of the company's resources among specific countries and products. Determination of the international marketing resource allocation begins by establishing the number of markets in which to operate and the desired characteristics of these markets. Once the international market portfolio of the firm has been determined, individual geographic markets may be chosen which are consistent with it. In deciding the scope of its desired export market coverage, two generic strategies are available to an SME: product-market concentration and product-market diversification.

Product-Market Concentration and Diversification

Market concentration involves the purposeful selection of a small number of the most promising markets initially for more intensive development (Hirsch and Lev, 1973; Ayal and Zif, 1979; Piercy, 1982). The definition of concentration and diversification seems to depend on firm size. For SMEs, serving up to six export markets is considered a concentration strategy while for larger established exporters, a maximum of 10 markets is suggested (Piercy, 1982). The exact number of markets is not an issue, however, but rather the determination of the number and nature of markets which the firm may serve effectively. In contrast, market diversification involves the simultaneous entry into as many markets as possible (Hirsch and Lev, 1973). For Piercy (1982) a market diversification strategy normally implies more than 12 country markets and marketing resources divided equally among all markets. Again, specific circumstances may determine the precise number.

A concentration strategy may be attractive as it requires a relatively low initial investment in marketing facilities, avoids the cost of dealing with small orders to little-known markets, limits the span of managerial control required and enables more visits to be made to each market. It also keeps the costs of international market research within the limits of the company's resources (Ryans, 1988). Market concentration may also provide a springboard for subsequent diversification and consequent stabilisation of the firm's exports (Hirsch and Lev, 1973). The advantages regarding product concentration may be identified analogously.

In contrast, the objective of a market diversification strategy is to obtain a high rate of return through market development rather than market penetration, while maintaining a low level of resource commitment by selecting more accessible target markets (Bradley, 1999). A market diversification strategy involves a greater risk for the exporter since it requires a larger initial investment in markets. Greater risk attaches to market spreading but where it is successful it has been shown to be more profitable (Hirsch and Lev, 1973). In the longer term, a market spreading strategy is usually followed by a period of market consolidation in which the number of markets is reduced as less profitable ones are abandoned (Ayal and Zif, 1979).

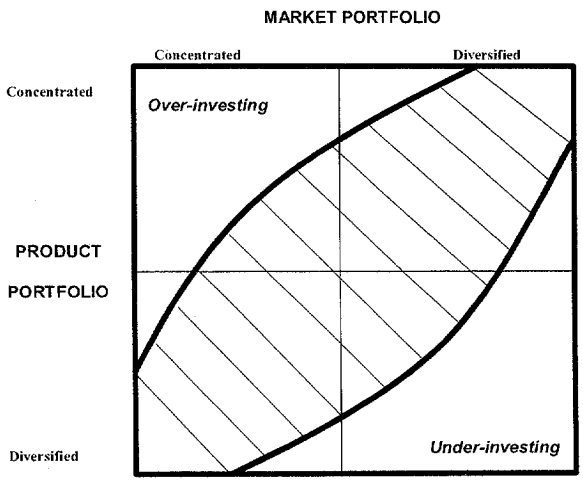
In practice, a firm is unlikely to select an extreme position on the concentration-diversification spectrum, but more probably will pursue a mixed strategy, serving a relatively large number of markets while concentrating resources on a selection of these (Bradley, 1999).

The advantage of such a mixed strategy is that it allows a firm to focus its strategy on the most promising markets, while maintaining sufficient flexibility to accept opportunistic business in other markets (Piercy, 1982). The issues regarding product diversification may be developed in a similar manner.

Feasible Product-Market Resource Allocation Strategies

If an SME combines market and product diversification strategies, it is unlikely to have sufficient resources to make the required marketing effort for all markets and products. This is the risk of under-investing in markets, a problem that arises in rapid growth markets especially (**Figure 1**). The risk of over-investing arises if the company serves only a few markets with a small range of products that may leave important markets open to competitors. This difficulty is most likely to occur in companies with new innovative products for which it is important to be the first mover in international markets. To avoid the risk of under- or over-investing it may be necessary to balance product and market allocation strategies, represented by the shaded area in the figure.

FIGURE 1 : CONSTRAINTS ON COMBINING MARKET AND PRODUCT ALLOCATION STRATEGIES



Competitive Advantage in the Business System

Obtaining competitive advantage by positioning the company in the business system means identifying ways of sourcing manufactured components and launching products included in the firm's portfolio. The core of the business system positioning concept is that the firm should be viewed as competing within a business system, not an industry (Gilbert and Strebel, 1988; Brandenburger and Nalebuff 1996; Lanning and Michaels 1988). A productive activity is viewed as a chain of many parts ranging from design to use by the final consumer. The various parts of this chain can be ordered in terms of stages of perceived value added.

The objective of the firm is to organise the business system to achieve an increase in the level of perceived value added or a reduction in the price charged so that the total perceived value to the customer exceeds the collective cost to the firm of performing the value activities embodied in the final product. Positioning for competitive advantage in this sense is based on the company's ability to organise the business system to provide the final customer with the desired perceived value at the lowest delivered cost, which requires superior performance in at least one of the business system activities. Only by adding more value in this way can the firm survive in a particular business system.

High perceived value strategies may be more appropriate in the emerging or embryonic stages of the product life cycle when the manufacturing process is not a significant competitive factor. When technology is still evolving, the business system may not have stabilised and competition tends to be confined to product innovation and development. High perceived value strategies tend to favour product-markets with short life cycles while low delivered cost strategies are more appropriate at the mature or standardisation phase of the product life cycle, which is characterised by rapid market development. Attention is focused on the production process and resources are directed to the entire business system with process technology, market positioning and distribution efficiency becoming critical.

By following a planned sequence of moves emphasising high perceived value now and low delivered cost at a later stage where one set of circumstances creates the conditions for implementation of the other, the firm successfully develops a strategy that identifies elements of perceived value that are not worth the delivered cost. These can then be unbundled and produced outside the firm at a lower cost. Additional elements of perceived value desired by the served seg-

ment can be included in the competitive formula at acceptable cost (Gilbert and Strebel, 1988).

Research Objectives and Propositions

The objectives of the research are to:

- identify and describe the scope, type and mix of markets and products developed in the early stages of internationalisation by successful SMEs, and to
- identify the strategy for achieving competitive advantage in chosen international markets.

From the literature reviewed, four research propositions are developed. In regard to the first research objective:

Success in international markets depends on:

- market concentration rather than diversification
- narrow market segment focus and non-price competition
- the development of markets similar to the home market
- entering a small number of markets with a small number of products initially.

For the purposes of this paper, concentration is defined as devoting effort and resources to at most three markets. Implied in the fourth proposition is the need to achieve critical mass in international markets.

In regard to the second research objective, two propositions are formed:

Successful exporters:

- pursue strategies aimed at high perceived value for the market segments selected, and
- contract out parts of the value chain in seeking competitive advantage.

Methods

Data Collection

The research involved the collection of data on the internationalisation strategies of SMEs in Ireland. Some of the data was available in re-

cords maintained by Enterprise Ireland (the government agency for industry and market development). Additional data was collected directly from the companies themselves using a questionnaire. A two stage approach to data collection was used; mail and telephone first, followed by personal interviews. Project Officers in Enterprise Ireland supplied much of the detailed background data based on externally audited data drawn from Enterprise Ireland records. In this way, part of the questionnaire was completed. The remainder of the questionnaire, referring mainly to strategic planning issues, was completed in personal interviews. Questioning of company management was confined to the development of marketing strategies.

Survey Firms

The sample universe consisted of wholly Irish-owned manufacturing firms with up to 500 employees that had received grants from Enterprise Ireland and which had passed the stage of initial exporting. It is believed that this experimental stage refers to the first two years of exporting (Wiedersheim-Paul, Olson and Welch, 1978). The definition of an SME is that accepted by the Commission of the EU: all companies employing 500 people or less. The sample frame was all successful companies where success was defined as having at least one third of total company sales in each of the two previous years derived from export markets. The firms in the sample may, therefore, be regarded as committed exporters.

A stratified sampling method was used. Sample selection was based on the shares of different sectors in the total exports of Irish owned manufacturing industry. It was decided to use data from the Enterprise Ireland Irish Economy Expenditures Survey (IEES) as a proxy for exports of Irish-owned companies by sector. This survey has the advantage that it discriminates between exports of indigenous and multinational companies and allows a breakdown at sectoral level, thus overcoming limitations of data on exports available from other sources.

Data on sales, components of sales and the destination of sales of manufacturing companies in Ireland and available in the IEES were used in the study. There are a number of limitations associated with this data. It is a sample survey rather than a census, which has implications for the representativeness of the data, particularly at NACE-sector level. Only companies employing 30 or more people are included in IEES. The IEES was considered, however, the best available source of data on exports of Irish-owned companies.

Given the concern about representativeness, it was decided to stratify the sample by three industry sectors: the modern sector, the traditional sector and the natural resource-based sector, taking account of the share of each in the total exports of Irish-owned companies. A sample size of 100 was selected. Details of the 82 completed questionnaires returned are shown below according to their NACE sector (**Table 1**). The natural resource-based sectors are slightly under-represented given their share of exports and the modern and traditional sectors are over represented. Since natural resource based companies still constitute almost half of the sample responses, this imbalance is not regarded as serious.

TABLE 1: DETAILS OF SAMPLE AND RESPONSES

Industrial Sector (NACE)	**Companies Sampled**	**Companies Responding**	**Response Rate**
	No.	No.	%
Modern [a]	30	29	35
Traditional [b]	16	16	20
Natural Resource [c]	50	33	40
Others	4	4	5
Total	**100**	**82**	**100**

a) Chemicals (4), Engineering (25).

b) Non-metallic minerals (4), Textiles (2), Clothing/Footwear/Leather (6), Paper and Printing (2), Miscellaneous (2).

c) Food (24), Drink and Tobacco (3), Timber and Furniture (6).

There were three principal reasons for the 18 non-responses: (a) the Enterprise Ireland project officer was not sufficiently familiar with the company to complete the questionnaire, having only recently assumed responsibility for the company, (b) though agreeing in principle to participate, the project officer became too busy with other matters to complete the questionnaire and (c) the company refused to participate for undisclosed reasons. In each case, no further attempts were made to collect information on the companies involved.

Given that 89% of indigenous manufacturing companies in Ireland employ fewer than 50 people and 97% employ less than 200, the sample may appear over-representative of larger SMEs. In the absence of an accurate breakdown of indigenous exporting companies by size, it

could be expected that successful exporting companies would tend to fall into the larger employment category. Accordingly the sample is taken to be broadly representative.

Almost three-quarters of companies in the sample were established since 1975, reflecting the radical restructuring which the Irish industrial base went through following entry to the EC in 1973, leading to the closure of many older, uncompetitive indigenous companies. Almost all companies in the sample had less than 20 years' exporting experience, reflecting the relative youthfulness of the indigenous industrial base already mentioned, coupled with the protected nature of the Irish market prior to EC entry. More than half the companies in the sample had sales of £1 million or less. Exports accounted for between one- and two-thirds of total sales for most firms in the sample.

Research Results

The research findings are discussed under two headings – product-market resource allocation in international markets and the competitive advantage of the firm within the business system. As the study deals with successsful exporters, it is necessary to classify the responding firms into various categories of success (**Table 2**). As may seen, 22 companies are classfied as successful having exported upto50% of their output, 60 companies as extremely successful having exported over 50% of their output.

TABLE 2: SUCCESS PROFILE OF SAMPLE COMPANIES

Success of SMEs	Proportion of Sales Exported	Companies	
	%	No.	%
Successful	0 – 50	22	26.8
Extremely Successful	51 – 100	60	73.2
Total		82	100.0

Data Analysis

The data is analysed using a combination of simple frequency distributions, multiple regression, logistic regression and statistical test designed for use with categorical variables.

Multiple Regression: We used a general linear regression model where the dependent variable was success of the SMEs, meas-

ured by the proportion of export sales. The independent variables were:

- market concentration
- narrow market segment
- non-price competition
- the similarity of export market to home market
- the number of different export products
- the importance of the elements of the company's strategy to seek competitive advantage in export markets, including: price; quality; on-time delivery; distribution network; after-sales service; customer relations; and the importance of contracting out parts of the value chain in seeking competitive advantage.

In answering the question 'How does the company compete in international markets?', respondents chose from five options: niche strategy, differentiated product, direct competition on price, developed a new product market and other strategies. The non-price competition variable was a non-metric categorical variable. Since it is inappropriate to run linear regression with nominal data, we used a set of dummy (0:1) variables which would serve as replacement independent variables. The multiple regression model produced results contrary to expectations. While many of the variables had the expected sign, none were significant even at the 10% level and two key variables — market segmentation and narrow market segment — had the wrong sign. We conclude that the multiple regression model does not fit the data.

Logistic Regression: As all the variables in the study are categorical or were combined into categories, techniques such as multiple regression analysis, which may be used when the dependent and independent variables are all measured on an interval or ratio scale, or discriminant analysis, which may be used when the dependent variable is a category variable and the independent variables are continuous, must be abandoned as methods of analysis. Compared to the multiple regression and discriminant analysis, the logistic model has advantages. It allows independent variables to be categorical and it requires less restrictive assumptions. The logistic regression model predicts whether an event will or will not occur, as well as identifying the variables useful in making the prediction.

TABLE 3: LOGISTIC REGRESSION

Variable	Coefficient (B)	Standard Error	Wald	Significance	Exp(B)
Constant	-4.762	104.045	0.002	0.964	
Market concentration	0.798	0.587	1.850	0.174	0.450
Customer groups	-0.833	0.983	0.718	0.397	2.299
Non-price competition	0.161	0.252	0.408	0.523	0.852
Similarity of export market	-0.279	0.810	0.119	0.731	1.322
No. of export product	1.066	0.592	3.240	0.072**	0.345
Price	-0.365	0.826	0.195	0.659	1.439
Quality	-0.014	0.772	0.003	0.986	1.014
On-time delivery	-0.187	0.925	0.041	0.840	1.206
Distribution network	-8.059	36.665	0.048	0.826	3.190
After-sales service	5.448	36.682	0.022	0.882	0.004
Customer relations	-0.068	1.581	0.002	0.966	1.069
Value chain	-1.107	1.185	0.873	0.350	3.024

Model Predictions	Successful	Extremely Successful	Total	% Correct
Observed	5	16	21	23.81
Successful	5	56	57	98.25
Extremely Successful	6	72	78	78.21

Goodness of Fit	χ^2	df	Significance
Iterations 6	12.66	12	
Log-Likelihood	7	-39.101	0.394
Log-Likelihood with only a constant term	7	-45.434	

** Coefficient is significant at the 0.10 level.

N=78, 4 missing cases.

TABLE 4: INFLUENCES ON EXPORT SUCCESS OF SMES — TAU-B TESTS

Variables	Kendall's tau-b	Std. Error	Signifi-cance
Product-Market Resource Allocation			
Degree of export market concentration	0.193	0.104	0.064**
The range of customer groups in exprt markets	0.169	0.099	0.088**
Non-price competition	0.086	0.061	0.008**
Degree of similarity of export market to home market	0.035	0.102	0.730
No. of different export products	0.174	0.095	0.066**
Competitive Advantage in the Business System			
Price	0.159	0.096	0.097**
Quality	0.181	0.101	0.070**
On-time Delivery	0.002	0.095	0.982
Distribution Network	0.019	0.159	0.874
After-Sales Service	0.147	0.076	0.112
Customer Relations	0.104	0.098	0.291
The importance of contracting out parts of the value chain	0.052	0.096	0.592

* Coefficient is significant at the 0.05 level.

** Coefficient is significant at the 0.10 level.

N=82

The statistical results are shown in **Table 3**. Only one element, the number of different export products, is found to be statistically significant at 0.10 level. Even though the logistic model is a more appropriate analysis compared to multiple regression and discriminant analysis, it has its limitations in this study. In the logistic model, for the independent variables with more than two categories, the statistical procedure will automatically convert them into two categories which leads to larger modifications to the data.

Measuring Statistical Association between Two Ordinal Variables: In measuring the strength of the relationship between two ordinal variables, we have Goodman and Kruskal's 'gamma' and Kendall's 'tau-b'. They are both based on standardizing the difference be-

tween the number of concordant and discordant pairs. If most of the pairs are concordant, the association is said to be positive. As values of one variable increase (or decrease), so do the values of the other variable. If most of the pairs are discordant, the association is negative. As values of one variable increase, those of the other tend to decrease. If concordant and discordant pairs are equally likely, we say there is no association. But Goodman and Kruskal's 'gamma' ignores all pairs of cases that involve ties, when two cases have identical values on one or both variables. Kendall's 'tau-b', however, attempts to normalize the difference between the number of concordant and discordant pairs by considering ties on each variable in a pair separately. In this study, we will use Kendall's 'tau-b' test.

In proceeding in this way, it is possible to examine the relationship that exists between a set of independent and the dependent variable, Export Success (**Table 4**). The tests and significance of these variables are discussed in the relevant section below.

Product-Market Resource Allocation

In regard to the strategic spread of markets and products the research findings suggest strong support for the first proposition. In relation to markets, on each of the three variables used to measure concentration or diversification, the majority of responses were consistent with a concentration approach (**Table 5**).

TABLE 5: PRODUCT-MARKET CONFIGURATIONS (N=82)

Markets Selected at Initial Product Launch				
1 Market	**2 – 3 Markets**	**Any Attractive Market**	**All Markets Where Firm Has a Presence**	**Total**
%	%	%	%	%
70	17	4	9	100

Product-Market Portfolio			
Product Portfolio	**Market Portfolio**		
	Market Concentration	**Market Diversification**	**Total**
	%	%	%
Concentrated	65	12	77
Diversified	22	1	23
Total	**87**	**13**	**100**

In this situation, the objective is to examine the relationship between successful SMEs and their market strategies in the early stages of internationalisation. The positive tau-b obtained shows that there is a positive relationship between the two variables. Successful SMEs are more likely to choose export market concentration strategy rather than market diversification strategy. Tau-b is statistically significant at the 0.10 level.

The vast majority of respondents were found to focus on a few markets only: 70% of respondents initially launch a product internationally in one market only; 87% concentrate their market investment in one or a few markets only. To identify the product-market combinations selected, the market and product concentration and diversification variables were combined. Almost two-thirds (65%) of companies combined product and market concentration while 22% combine market concentration with product diversification (**Table 5**).

Having discovered that successful SMEs are more likely to choose market concentration strategy, it is now necessary to examine whether these SMEs combine non-price strategy with the market concentration strategy. The positive tau-b indicates that successful SMEs are more likely to combine a non-price strategy with a market concentration strategy rather than combine a price strategy with a concentration strategy. Tau-b is statistically significant at 0.05 level.

Another relationship of interest is that between the success of SMEs and the number of export products in their early stage of internationalisation. The positive tau-b obtained for this relationship indicates that successful SMEs initially focus on a small number of products. Again, tau-b is statistically significant at 0.10 level.

To test for evidence of the risk of over-investing arising from a strategy of product-market concentration, the performance of companies pursuing various strategy combinations in relation to their export market penetration targets was examined (**Table 6**). In examining the proportion of companies pursuing each of the strategy combinations that achieved their export market penetration objectives, no difference in achievement is apparent. For all combinations, many more than half of the firms had attained their targets.

Most respondents seem to combine non-price strategies with market concentration strategy (**Table 6**), which provides support for the second proposition. Almost three-quarters of firms that pursue niche or differentiation strategies serve a narrow range of customer groups. Moreover, for most of the firms, the segment focus was not found to vary across geographic markets, reinforcing a preference for a narrow segment focus approach. The positive tau-b obtained for the relationship

between successful SMEs and the range of customer groups also supports this proposition. Tau-b is statistically significant at 0.10 level.

TABLE 6: PRODUCT-MARKET OBJECTIVES, MARKET, SEGMENT AND COMPETITIVE POSITIONING

Objectives and Strategy	Narrow Segment Focus		Broad Segment Focus		
	Market Con.	Market Div.	Market Con.	Market Div.	Total
Market Objectives	**N=54**	**N=9**	**N=18**	**N=1**	**N=82**
	%	%	%	%	%
On Target	72	67	83	1	
Off Target	28	33	17	0	
Competitive Strategy	**N=67**	**N=2**	**N=11**	**N=2**	**N=82**
	%	%	%	%	%
Niche Strategy	36	0	5	0	41
Differentiation	24	1	2	0	27
Price Competition	14	1	3	1	19
New Product Market	1	0	1	1	3
Other	8	0	2	0	10
Total	**83**	**2**	**13**	**2**	**100**

In regard to the types of markets and products selected by the sample companies most firms focus their export strategies on markets that are similar to existing markets, thus supporting the third proposition (**Table 7A**). Two major factors dominated the international market selection decision: geographic proximity and stage of development of the market. A third factor, size relative to the domestic market, was also important (**Table 7 B**).

The objective here is to determine whether success of SMEs in international markets depends on the development of markets similar to the home market. The positive tau-b obtained indicates that the more successful the SMEs are, the more similar the export market to home market they are going to choose. The tau-b statistic is not statistically significant.

In regard to approaches to internationalisation adopted by SMEs, it was proposed that the appropriate way of establishing a foothold in international markets for SMEs is to focus initially on a small number of mar-

kets and products to achieve subsequent international market penetration objectives in a planned, sequential manner, using existing markets and products as 'bridgeheads'. A large majority of respondents indicated that their initial move into export markets involved a highly concentrated market and product strategy combination thereby providing support for the fourth research proposition (**Table 7 C**).

TABLE 7: NATURE OF EXPORT MARKET

A: Nature of Export Market			
Similarity of Export Market	**Consumer Products**	**Industrial Products**	**Total**
	N=38	**N=44**	**N=82**
	%	%	%
Very Similar	7	11	18
Similar	24	33	57
Not Relevant	10	6	16
Different	5	4	9
Total	**46**	**54**	**100**

B: Most Important Factor influencing Market Choice				
Factors Influencing Choice	**Level of Importance**			
	First	**Second**	**Third**	**Top 3**
	N=82	**N=67**	**N=63**	**N=212**
	%	%	%	%
Geographic Proximity	34	31	21	29
Stage of Development	33	36	14	28
Size Relative to Domestic Market	12	15	21	16
Location of Customers	9	3	21	10
Market Similarity	5	12	21	12
Other	7	3	2	5
Total	**100**	**100**	**100**	**100**

C: Initial Market Concentration				
Products	**Markets**			
	1	**2 – 3**	**> 3**	**Total**
	%	%	%	%
1	49	6	4	59
2 – 3	22	4	1	27
> 3	7	2	5	14
Total	**78**	**12**	**10**	**100**

Competitive Advantage in the Business System

In regard to competitive advantage in the business system, successful SME exporters appear to pursue proactive outpacing strategies in accordance with the Gilbert and Strebel (1988) low delivered cost/high perceived value framework. Product quality, a critical element in any high perceived value strategy, was cited most often by respondents as one of the three most important elements in their strategies (**Table 8**). Moreover, of the other five elements commonly cited, three — on-time delivery, customer relations and product design and features — are all elements that contribute to high perceived value. While price, which may be taken as an indicator of a low delivered cost strategy, was identified as a significant element by the majority of respondents, it was the most important element for only 28% of respondents and in no case was strategy based only on price. This suggests that the basis of the competitive advantage lies in the achievement of a superior perceived value position, often in combination with low delivered cost, rather than through the pursuit of low delivered cost only.

TABLE 8: KEY ELEMENTS OF COMPETITIVE ADVANTAGE

Competitive Factors	Level of Importance			
	First (N=82) %	Second (N=81) %	Third (N=78) %	Top 3 (N=241) %
Quality	29	40	19	29
Price	28	17	17	21
On-Time Delivery	16	18	22	19
Product Design & Features	12	4	0	5
Customer Relations	8	10	28	15
Distribution Network	1	6	12	6
After Sales Service	1	1	2	2
Other	5	4	0	3
Total	**100**	**100**	**100**	**100**

At this point, interest centres on examining whether successful SMEs are more likely to pursue strategies aimed at high-perceived value. Six elements are examined here: quality; customer relations; on-time delivery; price; distribution and after sales service and contracting out parts of the value chain. The tau-b statistics for price and quality are statistically significant at 0.10 level.

In regard to the significance of the business system for international competitive advantage, most of the firms surveyed acknowledge the importance of superior performance of critical functions in the business system in achieving a competitive advantage over larger international competitors. The four elements of the business system identified most frequently as directly relevant to the attainment of a superior perceived value position were: research and development, production, marketing and purchasing (**Table 9**).

In regard to sub-contracting, the key to achieving international competitive advantage through sub-contracting according to the literature is to isolate and unbundle those elements of the business system for which the perceived value is not worth the delivered cost. The research findings support the proposition that such contracting out of elements of the value chain can play a significant role in efforts to achieve international competitive advantage. A significant proportion of respondents acknowledged the role of contracting out in their strategies. Cost saving was the principal reason given for contracting out (56% of respondents). Quality was cited by 14% of companies while cost and quality together was cited by 30% of companies.

Of the elements of the business system most frequently outsourced by respondents, four are functions that specialist subcontractors could be expected to provide more cost effectively than the firm itself: subassembly, distribution, processing and installation (**Table 9**). The other two functions that some respondents indicated they contracted out are production and design. Production was also identified by respondents as a critical element in a high perceived value strategy and so might be expected to be carried out in-house.

Here we wish to test whether successful exporters are more likely to contract out parts of the value chain in seeking competitive advantage. The positive tau-b supports that contention but it is not statistically significant at the 0.05 level.

TABLE 9: KEY ELEMENTS OF VALUE CHAIN

Elements of Value Chain	Level of Importance			
	First N=75 %	Second N=72 %	Third N=74 %	Total N=221 %
R & D	32	11	3	15
Production	23	10	20	18
Marketing	16	19	11	15
Purchasing	16	8	14	13
Quality Control	8	33	28	24
Sales				
Trans-portation	4	3	5	4
Distribution	1	3	0	1
	0	13	19	10
Total	**100**	**100**	**100**	**100**

Elements in Value Chain Contracted out	Respondents N=50*
Sub-assembly Processing	18
Production	7
Marketing	10
Design	1
Installation	2
After Sales Service	2
Transport	1
Distribution	1
Sourcing of Raw	14
Materials	1
Testing	1

* Sums to more than 50 because some companies contracted out more than one element of the value chain.

Discussion

Resource Allocation in International Markets

In regard to the findings on the spread of markets and products, a number of points are relevant. First, the findings are similar to those of Irvine (1988). In a survey of 72 firms, in which concentration was defined as selling into at most six geographical markets, Irvine found that 54% of firms indicated that they were pursuing a concentration strategy. The association of concentration with export success found in this research supports research findings elsewhere (Cunningham and Spiegel, 1971; Piercy, 1982). Moreover, it is consistent with the Doyle and Gidengil (1977) finding that exporters are unlikely to be successful unless they have a market concentration strategy since resources would likely be dissipated over a range of marginal markets.

In regard to the market, segment and competitive positioning research proposition, the findings are more in accord with Piercy's (1982) view that price and non-price competition can be combined with concentration or with diversification than with Ayal and Zif's (1979) view that concentration is associated with penetration pricing and diversification with price skimming. The firms surveyed appear to combine non-price strategies with a market concentration strategy. The explanation behind this may lie in the large proportion of respondents pursuing a niche or differentiation strategy to target particular segments within their narrow geographic market range.

Most respondents, however, combined a market concentration strategy with a product concentration strategy, which leads to the risk of being caught in the 'over-investing' trap (**Figure 1**) by leaving some important markets open to competitors (Segler, 1987). Examining product-market positioning combinations and company performance against export market objectives, however, provided no significant evidence of an 'over-investing' problem in the case of those combining product and market concentration.

Three possible reasons may be advanced as to why no substantial basis for sustaining the 'over-investing' hypothesis was found. First, consumer products companies in the sample appear to combine a highly concentrated market strategy with a somewhat broader spread of products, while industrial products companies appear to adopt a strategy of high product concentration across a somewhat larger spread of markets. The degree of flexibility within these overall concentration strategies appears to be sufficient to avoid the 'over-investing' trap. The second possible reason for the absence of an overspending problem

among 'concentrators' is that the problem is most likely to occur in the case where a company is a first mover in international markets. Many Irish SMEs do not fit this profile, being followers into established markets. The third possible explanation is that, being successful, these exporters may have protected themselves against the dangers of over concentration in other elements of their strategies, e.g. by selecting segments of greatest potential for them.

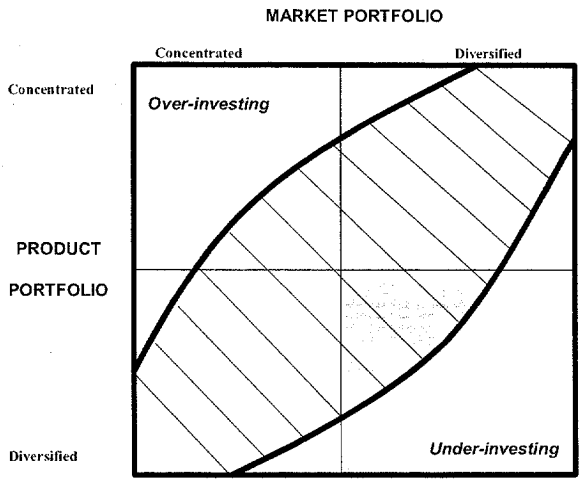
Major tenets in Ayal and Zif's (1979) model of generic strategies relating geographic market scope and segmentation to competitive position were borne out by the research. Most of the firms pursuing a narrow segment market concentration combination indicated that they were competing on non-price factors. This research supports the hypothesis that export success is more likely to be associated with a narrow segment focus and with non-price-based competitive strategies. This is also consistent with the findings regarding markets chosen by successful SME exporters in the early stages of internationalisation (Madsen, 1989).

There is some evidence, however, that a higher proportion of industrial products companies sell into diverse markets than consumer products companies perhaps because, for specialist industrial products companies, similarity of customer needs, rather than similarity of geographic market is the key criterion determining type of market chosen.

Based on evidence in the literature, it was hypothesised that export success was more likely to be associated with a conservative market and product development strategy than with a strategy that combined entry into diverse markets with significant new product development. The research evidence indicates that while this hypothesis can be suported, the majority of firms follow some degree of product-market development.

It would seem that successful exporters, by emphasising proximity, similarity and size, choose international markets with the implied intention of expanding from the domestic market incrementally. In addition, this approach also economises on the use of scarce resources. The market selection strategy of successful exporting firms seems to fit the concentric circles mould described by Segler (1987). The findings regarding approaches to internationalisation agree with the findings of other studies regarding the initial internationalisation step, most notably, that of Madsen (1989) for Denmark, a country similar to Ireland where SMEs are 'forced' to export at an early stage of their development.

FIGURE 1 : CONSTRAINTS ON COMBINING MARKET AND PRODUCT ALLOCATION STRATEGIES



Competitive Advantage in International Markets

In terms of Gilbert and Strebel's (1978) framework, the companies in the sample would be expected to follow proactive outpacing strategies aimed at delivering higher perceived value to satisfy the particular expectations of selected market segments, rather than aiming at a mass market with a pre-emptive low delivered cost strategy, as a large industry leader might be expected to do. An analysis of the competitive positioning strategies suggests that most companies pursue a proactive strategy: for the large majority of respondents, strategy is built on non-price factors rather than direct price competition.

The predominance of perceived value-related factors over delivered cost-related factors is a consistent finding in other research into sources of international competitive advantage for SMEs. The lower priority attached by respondents to the quality control function is interesting: it was the activity cited most often as being important but, in most cases, it was the second or third most important element of the business system. This suggests that it is perceived as a necessary but not sufficient condition for a strategy based on high perceived quality to be effective. The quality control function in effect acts as a check that other important activities of the business system have been performed to the required standard. The quality control and design func-

tions have also been identified as the most significant factors in the achievement of international competitive advantage by SME exporters in a number of other studies.

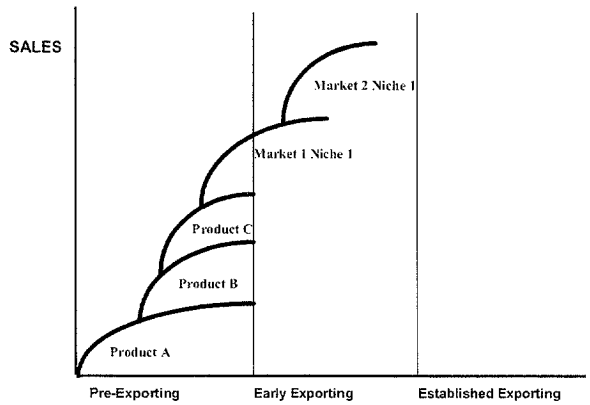
It may be, however, that having a subcontract capability allows the firm flexibility in managing fluctuations in market demand, thus facilitating achievement of international competitive advantage through the attainment of a unique perceived value and delivered cost combination. Only a small proportion of firms subcontract the design function. These cases would appear to depart from the hypothesised strategy framework in that a function associated with the achievement of high perceived value is being outsourced. The positive response of the majority of respondents indicates that subcontracting plays an important part in strategies to facilitate the achievement of a high perceived value strategy more cost effectively.

Possible International Marketing Strategies for SMEs

In general, expansion strategies used in the domestic market may be successful in international markets (Bradley, 1999). The smaller the firm and the more limited its export experience, however, the greater are the benefits from using a strategy based on products sold in the domestic market (Doyle and Gidengil,1977). The route to international markets for SMEs hypothesised in this paper is that, in the pre-export stage, the successful company would first exploit the domestic market opportunities to build up company resources, focusing particularly on developing a high capability, broadly-based management team and an efficient integration of the business system, which would be devoted to the internationalisation of a small number of products, say three: Product A, Product B and Product C in which the company has particular strengths (**Figure 2**). Company strategy for internationalisation would be concentrated on the product-market segment where the core competences of the company give it a competitive advantage.

The approach might be to open up each market based on the market or product niche in which the company has unique strengths. The process might evolve step by step, taking one market at a time, Market 1 Niche 1, learning from it and then using it as a bridgehead to transfer that learning to the same niche in the next market (Market 2, Niche 1). Consolidation and profitability would be achieved in each market before developing new ones. The company may develop its international operations by continuing to develop new markets in a step by step manner, ensuring consolidation before moving on to new situations.

FIGURE 2 : APPROPRIATE INTERNATIONAL MARKETING STRATEGIES FOR SMEs



Conclusions and Implications

This paper has sought to contribute to an understanding of the process of internationalisation by successful SMEs. These results contribute to the export marketing theory of the firm by supporting the view that firms participate in business systems comprising many other co-operating firms to compete in international markets. Based on the analysis, a number of conclusions may be drawn:

- the internationalisation step is more likely to be successful if a highly concentrated approach is taken: focusing on a few markets and products.
- in seeking to achieve competitive advantage over larger, and often more centrally located, competitors, strategy should reflect quality rather than price-related factors and should target a narrow range of customer groups.
- effective organisation of the key activities of the business system can contribute an important competitive edge in the pursuit of quality-based strategies.
- contracting out of business system activities that are not critical to the quality of the final product can facilitate international competi-

tive advantage by allowing SME exporters flexibility to deliver a superior quality product more cost effectively.

These conclusions have a number of implications for the management of SMEs seeking to develop export markets for the first time and for those already in the early stages of internationalisation. In the initial export market step, the SME should consider concentrating its resources and effort on a small number of familiar markets and on products matching customer requirements in the selected market, which may be different from the home market. With increasing export experience, the focus may then be widened gradually to encompass more demanding markets and products. Within the selected export markets, the focus should be on selected market segments with which the firm can achieve a strong competitive position based on non-price factors.

In seeking to achieve international competitive advantage, management should try to identify those parts of the production process that contribute most to final product value for their selected customer segment and concentrate efforts on these. At same time, they should explore the potential for providing more cheaply those elements of the product that cost the firm more to produce than their value to the customer. The potential for contracting out these activities to specialist sub-suppliers should also be investigated.

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