CHAPTER SEVEN: FINDINGS AND CONCLUSIONS:

7.0. INTRODUCTION:

7.0.1. In this final chapter of the thesis we conduct an assessment of the methodology, test further the hypotheses, present the findings and conclusions from the overall research study, and address the question of what further research may be needed.

7.0.2. More particularly, in evaluating this research project, we interrogated it by seeking answers to four main questions:

- What did the research set out to achieve?
- How was it done and how might it have been improved?
- What findings emerged and what were their implications?, and;
- What further related research could fruitfully be undertaken?

7.0.3. These questions receive answers in the following four subsections:

- The objectives of the research;
- Evaluation of the methodology;
- Research findings and their implications;
- A direction for future research.

7.1. THE OBJECTIVES OF THE RESEARCH.

7.1.1. This research has consisted in an empirical study of exporting organisation and practices in the UK knitted apparel industry. Its rationale stemmed from the perceived
importance to the economy of improving export performance on the one hand, in the face of inundation by low cost imports, and on the other the unsatisfactory state of knowledge about the determinants of effective export performance. Main aspects of this ignorance were:

(i) Lack of agreement among scholars on how export performance should be measured;
(ii) The great variety of research studies, in terms of the coverage, methodologies, variable labels and measurement approaches employed;
(iii) Consequently confused results and major obstacles to the comparison of findings from different studies;

7. 1. 2. Given this background, the main objective was to conduct confirmatory empirical research in the knitted apparel sector, with the specific aim of identifying determinants critical to export effectiveness/success and to subject these to rigorous testing. The early part of our investigation indicated that such a study would best be conducted at micro or firm level. A single industry was chosen mainly to avoid the inter-sector variability that, as argued earlier, could damage the findings from multi-sector research (Chapter 1, Annex 1). And the knitted apparel sector was selected for a number of reasons, including a lack of up to date information about factors influencing its exporting performance.

7. 1. 3. The main research problem was posed as a question:

What are the main determinants of effective company export performance in the UK knitted apparel industry?
In turn, this question was subdivided into six more specific questions, which were also used to operationalise the research. These questions are set out below.

(a) **Operationalisation of the research project**

- What are the main relevant export-related characteristics of the company, including its management, technology and products?
- What is its exporting experience and current scale thereof?
- How is exporting planned and organised?
- What are the export market selection methods and range of markets?
- How are export products priced, distributed and promoted?
- How adequate are export performance and profitability

7. 1. 4. All of these questions, together with those relating to the additional research problem that arose from the effects of discovered additional flaws in our subsample of studies, are answered in the chapters that report the results of our survey research and the data analysis. Chapter 4, *The shape of UK knitted apparel exporting*, describes in detail all relevant aspects of how sample firms are organised for exporting, their related practices and the results they achieve. Chapter 5, *Correlates of Export Performance*, identifies those independent variables that seem clearly to influence export performance. Chapter 6, *Multivariate Data Analysis*, describes the multivariate techniques used to analyse the data and reports on the outcome. Finally, below our 8 hypotheses are tested longitudinally with earlier and later knitted apparel survey data.

7. 1. 5. Our initial hypotheses were formulated in the light of the outcome of the literature search reported in Chapter 1. In the wake of the bivariate analysis in Chapter 5,
these hypotheses were reformulated to reflect the outcome of the correlation exercise and to summarise more accurately apparent conditions for effective export performance in the UK’s knitted apparel sector. Such performance was hypothesised (Para 5. 8.1) to be positively related to:

– Managements’ export commitment, positive attitudes and perceptions;
– Export planning and special staff skills;
– The use of international marketing research information;
– A mix combining formal and informal market selection methods;
– An increasing number of markets and regions served;
– A pricing approach which employs (a) both cost plus and market-based methods; and, (b) uses more than one type of sales term (e.g. FOB);
– The use of two or more types of sales channel, and Commission Agents in particular;
– Promotional intensity via trade missions, visits to trade fairs/exhibitions, number of annual face to face meetings and number of man-days abroad each year.

7. 1. 6. These modified hypotheses were subjected to the main data analysis process in Chapter 6. Three main forms of multivariate analysis were employed and encouraging results were obtained. The answer to the research problem of what are the determinants of effective export performance in the UK knitted apparel sector are to be found primarily in chapters 5 and 6, in the findings from earlier sector surveys and in the views and perceptions expressed by experts thereon.  This multi-dimensional perspective should do much to avoid some shortcomings in earlier research where reliance had been placed on one method of assessment. (See Chapter 3 for a discussion of this problem).
7.2. EVALUATION OF METHODOLOGY

7.2. 1. The research project was conducted by means of a main mailshot survey in a single-sector (the UK knitted apparel industry), one important reason for this focus being to avoid inter-sector variability (See Chapter 1, Annex 1), and with the aim of collecting the maximum amount of relevant data from a representative selection of UK knitted apparel exporters.

7.2. 2. Distribution of the survey questionnaire was to a sample of exporting manufacturers and it was addressed to the managing director. With the intention of maximising representativeness, a random sample, stratified by company size and ranging over the three main sectors of the industry – outerwear, underwear and hosiery, was selected.

7.2. 3. To encourage a strong response the mailshot was followed-up by repeated telephone calls and it was explicitly recognised that the effect of this second form of communication would also reduce technique-specific disadvantages (or common method error (See Chapter 3).

7.2. 4. With a response rate of 70 per cent, the completed sample embraced some 44 per cent of the number of firms in the sampling frame. (thereby enhancing the results through the agency of the Finite Population Correction). It gave good coverage of the exporting subsector in terms of firm size, product types and the range of export performances, from very low to very high (See Chapter 4).
7. 2. 5. Carried out in late 2000/early 2001, the main survey collected the data that provide the centrepiece for this study of exporting. It was augmented from two other (longitudinal) data sources: compatible knitted apparel survey data collected by the writer in 1988 and 1989; and, in 2007/8, a random sample survey of the (43) survivors of the 71 respondents in 2000/2001. Except for 1988 (personal interviews), all surveys had random samples and were conducted by mailed questionnaires, followed up chiefly by letter and telephone. The mini-survey produced full responses from 8 firms, essentially panel-data and comprising a 19 per cent sample of the survivors. Data from all of these sources are drawn upon later in this final section of the thesis; those from the random 1989\(^1\) survey also of course featured in Chapter 4. Regrettably, it has not been possible here to exploit fully the 2007 data (Chapter 3 discusses panel data).

7. 2. 6. The Export Performance Model was seen as an important part of the research design, as the visual manifestation of our location, on the basis of previous research, of potential export determinants almost entirely within the firm and its export marketing strategy- and of course this was reflected in our selection of the Resource-Based View as the guiding theory for the project. The model was of considerable assistance in helping to structure the questionnaire (see Chapter 3).

7. 2. 7. Factors featuring in the questionnaire were chosen mainly because of their perceived importance in earlier research or because they had not been adequately treated there. (see Chapter 1). Based on the outcome of the literature search and review, the research hypotheses played a major part in the formulation of the related questions.

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\(^1\) The relative smallness of this sample (n=30) ergo its low IV/case ratio prevented the use of full MRA or CCA.
It does need to be repeated, however, that a number of questions were included with the primary aim of providing a better understanding of individual firms and their activities – and essential function.

7. 2. 8. Data Analysis: A variety of data analysis methods were employed overall. Survey data analyses consisted mainly of frequency distributions (Chapter 4, The shape of UK knitted apparel exporting); Pearson correlation analyses (Chapter 5: Correlates of export performance); and multiple regression, partial least squares, and canonical correlation analysis (Chapter 6: Multivariate Data Analysis.). In addition, t-group tests, partial correlation, and partial and simple regression analyses were used for more limited purposes. All but one of these analyses were conducted using the Statistical Package for the Social Sciences (SPSS), versions 12 to 15. The exception was PLS; Umetrics UK Ltd kindly ran our data as this could not be done on SPSS versions 12 to 15.
7. 2. 9. The chief aim of the data analysis was of course to relate selected independent variables systematically to the dependent variable export performance with the aim of identifying those associated with effective export performance.

7. 2. 10. In line with usual practice, we consider now what might be done differently if the study were being undertaken again. Outside of an experimental situation, which was not feasible here (See Chapter 3), we cannot investigate causality. Our point cross-sectional data will not permit us to do so. There are, however, several initiatives that could usefully be taken in a new study that did not build directly on this one. First, it might be advisable to correlate fewer IVs than we did here (Chapter 5) and thus to reduce the risk of Type 1 error.

7. 2. 11. Second, the results we have obtained here would make for a shorter questionnaire and thus allow for more detailed questions on key topics, without risking demotivating respondents. Arising from the study’s findings, some that might feature could include: clarification of specifics on trade missions, asking eg about destinations and targets visited to ensure there is no duplication or ambiguity, such as with visits to retailers, where the latter are explicitly catered for elsewhere on the questionnaire. It could also be helpful to pose a series of questions that might distinguish between visits that are for data gathering, for promotion only, or for both purposes. Finally, the following quintet of suggestions, relating sequentially to measurement, planning, qualifications, technology, and pricing, might be seen to have merit.
(i) Measurement: It would appear to be beneficial to enhance further the parametric nature of the data, increasing thereby their compatibility with eg Canonical Correlation Analysis. The use of more Likert scales and ranking questions would assist in this regard. As was done in the case of the 2007 mini-survey, respondents could be specifically requested, *inter alia*, to regard all interval spaces on Likert scales as being of equal length and value. And Rodeghier usefully reminds us (*Surveys With Confidence, 1996, p15*) that if Likert scales are to justify the use of general linear model techniques for data analysis they must comprise not fewer than five points.

(ii) Planning: Our questions on strategic and export planning, which included some check questions, took us as far as feasible in a long questionnaire without risking turning respondents off. A shorter follow-up study could expand on these, also asking more questions about, for example, the source, nature and extent of inputs to the process. In view of our findings on this hypothesis, such data should provide a better insight.

(iii) Qualifications: More information about staff qualifications could usefully be sought. It would be informative to know managers educational level and the extent to which they hold relevant qualifications, as their counterparts in eg Germany and Italy are known to do. (See Chapter 2). Our question about the possession of qualified designers would benefit from asking specifically about the holding of a relevant certificate. Otherwise there is some risk respondents might consider that `sitting by Nelly’ for long enough might justify an affirmative answer.

Shipping: While the answers on the topic of shipping were interesting and informative they did not prove to be of any practical use and would not need to be repeated.
7. 2. 15. (iv) **Technology:** Different level of technology might well affect firms competitiveness so it could be advantageous to measure this in surveys. In our mini-survey 2007 (qv) we did move a little in this direction by asking about any investment in IT over the past 5 years. Something more ambitious could be tried - perhaps on the lines of Daly, A. et al’s 1985 NEDO study of the age of UK and West German machine tools and the relative skills levels of their users.

7. 2. 16. (v) **Pricing:** In view of our joint-pricing IV’s tiny contribution to multiple regression and its disruption of the Canonical Correlation Analysis, our study has not really made much of a contribution to knowledge in this area. As a key part of the marketing mix, and given the mixed findings, it needs to be investigated further. Alternative formulations to those used here could be useful. Respondents could be asked to cast much more light on the process including, for those claiming a market-share orientation, information about precisely how they ascertain the scale of their shares in particular export markets- recognised as a difficult task at best.

7. 3. **RESEARCH FINDINGS AND THEIR IMPLICATIONS.**

7. 3. 1. **Introduction:** This section begins with a summary statement emerging from the research project as a whole. It then briefly discusses and assesses the evidence bearing on the testing of each of the 8 surviving hypotheses. In this endeavour it draws upon additional evidence that could not have been well marshalled in the main study without risking obscuring the main argument. These additional sources are:

- the 1989 random sample of 30 knitting apparel exporters, for most of whose variables bivariate correlation data and subset Multiple Regression results are available;

- Data from the 8 respondents to the 2007/8 mini-follow-up random survey of the (43) surviving firms from the 2000/2001 survey;
A further group of 20 knitted apparel exporting firms who were interviewed by the writer in 1988. A judgemental sample, these firms were selected because of their generally good export performance. Data are not complete on all topics and of course this sample cannot claim to have any external validity.

Finally, where feasible, the argument draws upon other parts of the survey data in support.

Overall Results from the research

7.3.2. The broad outcome of our multivariate tests, using sequentially Multiple Regression, Canonical Correlation and Partial Least Squares, was positive. All three of these techniques were largely supportive of one another – with PLS, at ease with small samples, usefully buttressing the other two. On the negative side, the price determination IV (Cost Plus and Market-Based pricing –PrcCPMB- tested further below) did not reach significance. Two other IVs : LOGQTSC (No of Quotation Terms plus No of Sales Channels) and COMPLAN (Formal Export Market Plans and Forecasts Export Sales) - were significant at p<0.01 level but had small and negative Betas. MGTCOM (Continuity of Exporting plus Commitment) was significant at the 0.05 level. All of the remaining IVs were significant at the 0.01 level. The composite IV LOGMDAFTF (Nos of Man-days abroad plus Face-To-Face meetings) had the highest significance, followed by LOGEXSPRED,(No of Export Markets plus No of Geographical Regions served) SELBOTH (Market Selection by formal and informal methods), VISITS, (Trade missions, visits to Retailers and Trade fairs & exhibitions) Special Staff Skills , and Commission Agent. Except for SSS (very small) and SELBOTH (smallish), these IVs had also the highest Beta values- and MGTCOM also did well here. Taken as a whole, the results from
the research relate effective export performance primarily to increased numbers of markets/ regions, time spent abroad and management commitment to exports.

7. 4. Further Assessment Of The Hypotheses

7. 4. 1. In the following sections each of the remaining hypotheses is considered further, in the context of the other research information mentioned above. References variously to subset, submodel and individual hypothesis tests relate to Table 6.4 data

(a). Management commitment, positive attitudes and perceptions are positively related to export performance

7. 4. 2. The general importance of management commitment to the achievement of most or all business objective is not only obvious but well supported by general empirical research. In exports, scholars, including Zou et al, report that, as in all earlier reviews in the field, it has been found to be a major determinant of export performance.(5. 3. 1 et seq).

7. 4. 3. Our tests of the hypothesis for the knitted apparel sector used the three IVs carried forward from bivariate analysis: 'Continuous', 'Committed'; and 'UK should join the Euro' (See Table 5.3). Of this trio, only 'Committed' achieved significance (B=.238: p=.078) in our first Multiple Regression subset model test (Table 6.4); and in the full MR model regression (Table 6.5), the same three (now as composite IV MGTCOM) again produced a significant outcome (B=.197: p=.303*; so, in both cases, significance was at the alpha .05 level. The Canonical Correlation Analysis (CCA) result (Coeff. .309; r=.497; r sqd =.247) also supports all of these findings.
7. 4. An analysis of the 1989 data, using that year’s counterparts of the same three variables in subset regression, showed the submodel failing to reach significance (ANOVA = .195) - and only ‘Committed’ doing so, when it was run in Simple Regression (B = .316: p = .088). It is encouraging that not only has the hypothesised positive relationship between export performance and management commitment been supported for knitted apparel by the 2000 survey sample data, but that it also obtained worthwhile longitudinal support from the 1989 same sector data.

7. 4. 5. It is also interesting to observe both magnitudes and trends for the three IVs – continuity, commitment and export policy - at four different points over the last 20 years. It will be noted that at least 86 per cent of firms surveyed in each of these years were continuous exporters. Commitment to exporting, ranging from 95 to 88 per cent, has also been at a high level. And, in the realm of export policy, two-thirds or more of respondents planned to increase the level of their exports, with from 15 to 37 per cent reporting the intention of keeping the ratio to its existing level; the growth in the latter tending to offset some decline in the former percentage. (See below. Table 7.1).

(b) Export planning is positively related to export performance
7. 4. 6. Unsurprisingly, empirical studies support the expectation that planning pays dividends in exporting. Zou et al, for example, in their review found it to be a consistent determinant of export performance and claimed that the few negative findings on planning were more apparent than real. (Para 5. 4. 3 et seq.).

7. 4. 7. Our results for the 2000 survey sample were positive though less strong. Of the three IVs carried forward from bivariate correlation: ‘Formal export market plans’,
`Forecasts export sales’, and `Analyses Export Profitability’, only the last reached significance in the Multiple Regression (individual hypothesis tests) at alpha 0.05 (B= .317: p=.009)- possibly an indirect effect- though the first: Formal Export Market Plans (B=.241: p=.066) was significant at the p<.01 level. But while the composite IV COMPLAN was significant at the p=< .01 (.319**) level, in the full MR model, for some unknown reason, it generated not only a very small but also a negative Beta (-.078). This result, which appeared similarly in CCA output (Coeff. -.176: r =.471: r sqd =.222), prevented us from reaching a clearcut conclusion about the relationship between company planning and export performance in the UK knitted apparel sector. As the Table 6.5 indicate, Special Staff Skills was significant at the O.05 level but had a very small B value.

7. 4. 8. For the 1989 data, the only two available counterpart variables, behaved almost in reverse to the 2000 survey. In subset Multiple Regression, Analyses Profitability was not significant (B=.05: p=.791), contrasting sharply with Formal Export Market Plans (B=.513: p=.011). The latter’s strength manifested itself more clearly when run in Simple Regression (B=.537: p=.002. We may yet find that some glitch in the full model accounts for the negative Beta. But taking together the output from the 2000 and 1989 surveys, it seems reasonable to claim to have found useful support for the hypothesis that export planning is positively related to export performance.

7. 4. 9. Data from the 1988, 1989, 2000 and 2007 surveys show relative stability in the numbers of firms taking positive initiatives in respect of formal export market plans, export sales forecasts, analysis of export profitability and designing for exports (Table 7.2). It will
be seen that, except for 2000 (30%), more than half of respondents prepared market plans; around half drafted export sales forecasts and about the same proportion designed specially for exports. Export profitability was analysed by from two-thirds to four-fifths.

(c). Export performance is positively related to the use of international marketing research information

7. 4. 10. The importance of relevant and adequate export market information- and its proper use- to effective export performance has been repeatedly emphasised by specialists including Souchon et al. Nonetheless, findings on the impact of export market information on performance are not uniformly positive. Thus, for example, Leonidou found highly significant relationships between performance and each of the two sources: attendance at trade fairs; and personal visits to export markets. And Zou et al concluded that while such information had a positive impact on a number of performance measures, its effects overall were mixed. (Chapter 5).

7. 4. 11. Turning to our 2000 survey sample data, only visits to Trade Fairs and exhibitions emerged as significant from our individual hypothesis tests (B=.321: p=.01: See Table 6.4a); and a similar result was obtained in full model Multiple Regression Analysis (VISITS: B=.164; .336**) though, as will be seen, the Beta was only half the size. CCA usefully supports these results (VISITS: Coeff. .173, r=.500, r sqd=.250 ). It was also encouraging to find longitudinal support for these findings in the 1989 survey data: where the outcome of Simple Multiple Regression likewise found Trade Fairs and exhibitions the only significant IV (B=.534: p=.005). We thus reasonably concluded that our hypothesised positive linkage between sound export market information and effective export performance had received good support.
It is also instructive to compare more closely main related characteristics of our total of four knitted apparel samples, in respect of information IVs (Table 7.3). As will be seen, that percentages are not too dissimilar, especially for the 2000 and 1989 samples and the proportion undertaking marketing research has remained remarkably constant over the years. The high values for three of the 1988 sources may owe something to the sample selection criteria (high performers). It is noteworthy that in neither 2000 nor 1989 did formal market research reach significance. Yet it seems clear that a much higher usage of this form of research will have an essential contribution to make to the future exporting performance of the UK knitted apparel sector.

(d) A combination of formal and informal market selection methods is positively related to export performance

As we have seen earlier, the methods used to select export markets can be formal, informal or both. The formal or systematic approach can often achieve close matching of export customers markets with a firm’s marketing strategy, while the ‘informal’ method may lack efficiency but be, nonetheless, effective. Both methods, when used together, can generate synergy. However, scholars in the field tend to recommend that priority be given to the formal approach (Chapter 5), while recognising the continuing value of the informal, including its flexibility and ability to respond to opportunities.

The shortage of research findings on the general topic of market selection methods is perhaps most explicitly reflected in the fact that in recent times only one review is known to have listed it among IVs that are significant determinants of export performance (Chapter 5: Chetty 1993); and another has stressed the need for more related
research (Leonidou, 2002). Our results for four surveys of knitted apparel firms over 20 years thus cast considerable light; data from two of them tested our hypothesis.

7. 4. 15. In the Multiple Regression test of all three market selection approaches (Table 6.4) only the Formal plus informal IV was significant (ANOVA =.001; B=.379; p=.001; with the full Multiple Regression Analysis model producing a somewhat weaker result (B=.086: .382**). The Canonical Correlation Analysis results were: (Coeff. .189: r=.607: r sqd=.368). Further support for our hypothesis was provided by the 1989 data. Here again 'Both' was the only statistically significant variable; and in Simple Regression produced a strong result (ANOVA=.008; B=.476: p=.008). Thus the hypothesis that a combination of formal and informal market selection methods is positively related to export performance has received convincing support from these multivariate tests.

7. 4. 16. It will be seen that, for all years( Table 7. 4), informal selection methods on their own greatly outnumbered the formal, also far outweighing the numbers using both formal and informal methods. There are also indications that there has been a gradual increase over the years in the 'Both' category, at the expense of the 'Informal'. And the stability of the 2000 and 2007 ratios is interesting, although of course the latest sample is very small. While not susceptible to proof here, it may be that the rise of 'Both' reflects some movement by exporters towards more professional selection as a counter to the growing intensity of competition. This seems to have been so for the respondent who had moved from 'Both ' in 2000 to 'Formal' only by 20072 But, as is clear, the 'Informal' approach is still dominant.

2 The firm has also in the interim increased its growth rate, export ratio and number of markets.
7. 4. 17. The sample survey data had shown that a high proportion of those firms who selected their markets informally also attended trade fairs and exhibitions and most found them useful (Chapter 4). In addition, we knew that one of our (1989) sample exporters had creatively ‘piggy-backed’ on numerous other-sector UK trade missions to markets (worldwide) he wished to explore\(^3\). We hypothesised that some firms might be selecting their export markets more formally than appeared to be the case by choosing fairs that were orientated towards buyers or markets they wished to target.

7. 4. 18. We tested this in the 2007 follow-up survey, when we also asked firms to list the criteria they used in export market selection. On the first, one respondent chose fairs likely to marshall the maximum number of international buyers, while the remainder based choices on their (undefined) ‘industry experience’. Only two of the eight respondents applied apparently realistic criteria to the selection of new customers; the remainder concerned themselves only with one or other of two aspects of creditworthiness /ability to pay (either ‘ability to pay’ or whether they would deal on a ‘pro forma’ basis (i.e pay ahead of delivery)]. Thus our 2007 test did cast some little light- which did not, however, reveal the existence of much ‘system’.

7. 4. 19. Despite the good support for our hypothesis reported above, it seems imperative that UK knitted apparel exporters move quickly towards a predominantly formal method of selecting new export customers and markets. As noted repeatedly above, competition in the sector is intensifying further. Top EU expert advice is that a high level of professionalism

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\(^3\) This firm described how its distinctive hosiery had entered various world markets; **USA:** 1946 approach from Brooks Brothers, NYC, who had seen the product in Dublin; **Germany:** firm showed at Hanover trade fair; **Denmark:** firm met Danish agent at Hanover; **South Africa:** approach to firm by S African agent who had seen the product in USA; **Italy:** firm approached by Italian wholesaler who had seen the product in Germany; **France:** approach by French wholesalers when the firm showed at SEHM; and; **Japan:** Japanese wholesaler saw the product in NYC and contacted firm via the British Embassy, Tokyo. (Overall, a case of Emerson’s mousetrap, perhaps).
will be needed to prosper in the future world market and to find the market niches and
create the necessary new products. (See Chapter 2, sections C and D). There will be little
room left for the more relaxed and traditional informal approach to selection if firms wish
to survive and prosper.

(e): Export performance is positively related to the number of export markets
served.

7. 4. 20. There are some reasons for doubting the general applicability of BETRO’s
conclusion that exporters could achieve the same level of overall performance in 10 or
fewer markets as in 160 (BETRO, op.cit., 1976, P16: See Para 5. 5. 6 also). It seems
essential to proceed case by case, taking into account at least the nature of both the product
and of the market. Is the retail system centralised or fragmented?; is there a volume
market for the product or only a very limited one? Piling in firm marketing resources to
sell a volume product to many dispersed small retailers in one export market could make
good business sense. It might not in the case of an expensive luxury product for which the
market in any country is likely to be tiny; such is the case for some types of knitted
apparel.

7. 4. 21. The BETRO hypothesis has been tested a number of times, but as far as we are
aware, only in multi-sectoral studies. In his meta analysis, Zou et al reported mixed effects
for market concentration; while Leonidou, in his, found significant results for both market
concentration and market spreading overall, but mixed results at detailed level. Crick
tested the proposition on a specialised multi-sectoral sample of high performing firms. He
concluded that in the right circumstances either strategy could be successful (Para 5.5.6 et
The overall results of these various tests seem to justify a rating of indecisive. But market and product characteristics do appear to be important considerations.

7. 4. 22. Our preliminary test of the BETRO proposition in knitted apparel (2000 survey data) found no significant difference in means between the two subgroup of successful exporters (defined as an export ratio of 25% or more: See also Annex 8) with fewer or more than 10 export markets. Bivariate correlations showed export performance varying directly with both number of markets and number of geographical regions served. And this was also the case with the outcomes of the 3 multivariate techniques: Multiple Regression (individual hypothesis) B=.451: p=.001; Full model: .447**: CCA (Coeff. .223: r =.650: r sqd =.423). These findings were echoed in the 1989 data: in Simple Regression IVs were both significant (No of markets: B=.47: p=009: No of regions: B=.564: p= 001). Our hypothesis that export performance varies directly with the number of export markets has been strongly supported by the research (and likewise that for the number of regions served).

(f). How price is determined is not related to export performance.

7. 4. 23. Leading academics in the field stress that as price is the only element in the marketing mix that generates revenue directly, the method used to determine it has a crucial part to play in profitability. They also argue that the cost-plus approach, still widely used by manufacturers, does not fully exploit the opportunities available in export markets. It is regarded as mechanical and formulaic and an approach that fails to maximise revenue and profitability.

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4 Interestingly, the same preliminary tests for 1988 and 1989 data were significant. See Table 7.5
7. 4. 24. It might reasonably be expected that empirical testing could clarify the role, if any, of the price determination method in export performance generally. But it appears there is as yet no agreed conclusion. One of two meta-analysts found that price adaptation was essential to performance; the other, that how price was determined had little effect thereon. (Para 5.6.6 et seq).

7. 4. 25. For knitted apparel exports the results of the multivariate tests accorded with expectations. In the Multiple Regression test of the individual hypothesis the model did not reach significance (ANOVA = .189); and this was also the case for the full model which fell far short (p = .152). The significance found at bivariate level for the combined cost plus market based IV had not therefore survived. For 1989 the variable had not been significant at bivariate level and in Multiple Regression also it fell far short (ANOVA = .674). Moreover, the characteristics of this variable disrupted Canonical Correlation Analysis, producing many negative signs, and CCA did not function properly until the pricing IV had been removed. (Chapter 6).

7. 4. 26. Our evidence from the survey supports the hypothesis that, in knitted apparel exporting, how price is determined does not affect performance. It also suggests that, in common with other sectors, the cost plus method continues to dominate (Table 7.6). Nonetheless, in the globalised trading world there will be no product-related factor that can be ignored in ensuring competitiveness, including price. Indeed, successful trading may depend crucially on the development of innovative pricing measures, whose shape is not discernible to us at present, but which are not the less important on that account.
(g) Export performance is positively related to the use of two or more sales channels and Commission Agents in particular.

7. 4. 27. Over the years a considerable amount of scholarly attention has been devoted to the effect, if any, of sales channels and their various aspects on export performance. But this research has not provided unequivocal answers. To take two examples: in their meta-analyses, both Zou and Leonidou found that the results of these studies were mixed (Para 5. 6. 13 et seq).

7. 4. 28. Turning first to practice in UK knitted apparel exporting, survey sample firms were using one or more types of sales channels, with two types being the most common. Ranked by the numbers of sample firms using them, the most popular channels were: 'Direct to retail' (86), Commission Agents (79), Importers/Distributors (74), and, far behind, Buying Offices (42). (See Tables 4.20 and 4.21a).

7. 4. 29. As the two significant IVs carried forward from bivariate analysis, Number of Channels Used and Commission Agent, were disparate they could not be regarded as comprising a subset in Multiple Regression. Each was therefore run separately in Simple Regression, in the foregoing order and to the following effect (B=.338: p=.005); (B =.314: p=.009). In the full MR model Commission Agent continued to be highly significant (.314**), as did the composite IV LOGQTSC (No of sales terms plus No of sales Channels) (.397**). However, the latter’s meaning here, and in CCA, is uncertain because its Beta is both very small and negatively signed (-.097); but in CCA Commission Agent maintains its significance (Coeff. .205; r = .461: r sqd =.213 ). In Simple Regression tests of the 1989 counterpart IVs, Number of sales channels failed to reach significance, but Commission Agent was significant (B=.367: p=.046). In the light of these
findings, and the significance of Commission Agent in both instances, it seems clear that our hypothesis needs to be reworded to read: Export performance is positively related to the use of Commission Agents in particular.

(h). Promotional intensity is positively related to export performance.

7. 4.30. At least intuitively, it makes sense that the extent of the promotional effort should positively affect export performance and the findings of two scholarly reviewers do indeed point in that direction. Zou concluded that promotional intensity seemed to affect positively three aspects of exporting; and Leonidou linked effective promotion of exports to taking part in trade fairs and visiting foreign markets and information collection—although it of course does relate also to promotion.

7. 4.31. For knitted apparel exports promotion was again tested using both 2000 survey sample and 1989 survey data. Of the three variables used in the individual hypothesis test in Multiple regression (Table 6.4a) neither of Total FTF meetings (B=.126; p=.289) nor trade missions (B=.179; p=.109) was significant but Man-Days Abroad (B=.378; p=.003) was strongly so. In the full Multiple Regression model it had the highest statistical significance of all IVs (.543**) results mirrored in CCA (Coeff. .542: r= 868: r sqd =.753). MDA was the only relevant IV to reach significance in the 1989 data and, in Simple Regression (B=.580; p=.001) it usefully fortified the 2000 survey results. There is thus strong support for the posited direct variation of export performance with promotional intensity.

Hypotheses: Outcome of Testing.

7. 4.32. It is satisfying to find that most of the 8 hypotheses that emerged from Chapter 5 have found additional support in the final statistical tests conducted above. Those were: Management Commitment; Company planning; Use of international marketing information; Market selection by formal and informal means; Market spreading;
Commission Agents as a likely more effective sales channel (modified from the original hypothesis to be more specific); and, above all, promotional intensity. Where relevant these are discussed further below.

**Overall conclusions from the research project, with special reference to the implications for UK manufacturing exporters of knitted apparel**

7. 4. 33. As Chapter Two has shown, international competition in knitted apparel is becoming ever more intensive, in the wake of the ending of the MFA and quotas, and the growing power of India and China in particular. The EU experts have described the type of strategy that will be needed if the UK and other EU exporters are to prosper in this new environment. (Chapter 2, Section D). But the UK knitted apparel industry is not, as we have seen, especially well placed, even vis a vis its main EU15 partners, to implement this strategy. It is differentially disadvantaged in both its home and the EU15 markets.

7. 4. 34. It has been shown that UK retailing is the most highly concentrated of any in the EU15, with intense price competition, a high level of low cost imports, and few remaining independent outlets to provide alternative outlets for manufacturers and to give scope to the young designers on whom so much depends. One effect of the competitive home: market is of course the greater demands being made on manufacturers in terms of response times, prices and service levels.

7. 4. 35. We have also noted that the other members of the EU 15 enjoy to a greater or lesser extent comparative advantages with their retail system. Though import penetration is also high, their much more fragmented retail systems are harder for foreign suppliers to penetrate. Moreover, in some states, especially Germany, the power balance is reversed, with manufacturer concentration much higher than in the UK and retail concentration...
much weaker; and there are other obstacles too. In the crucial area of product appeal, the Italians especially are famed for their design flair.

7. 4. 36. The UK’s other disadvantages include: a lower level of capital investment, a productivity gap especially with its main EU15 competitors, a declining infra-structure; the disadvantage of having come late to outward processing; and skills and education levels, including that of management, in textiles that are less good than those of its rivals; a continuing tendency to be production-oriented; less than ideal use of design; and weaknesses in marketing, advertising and promotion skills.

7. 4. 37. To stand a reasonable prospect of prospering in future overseas markets is seems clear that UK knitted apparel exporters as a whole will need to improve on multiple fronts. We have sought below to discuss and recommend, on the basis of this study and mainly around the hypotheses we have tested, steps which should improve the prospects for exporting firms. Some of our suggestions are made on the basis of other general research linked to the future market needs and thus do not flow directly from the study.

7. 4. 38. Firm size and performance: Noting mixed findings from the numerous studies of the hypothesis that larger firms are more effective exporters, from our three tests we have not found support for the proposition. Moreover, in our 2000 survey sample, nearly 40 per cent of the small exporters were exporting 60 per cent or more of output; nor were the number of specialised functions possessed by exporters found to vary with firm size.(Chapter 4). In addition, small firms are probably more agile in adjusting to changing

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5 There of course remain a number of excellent UK exporters in this sector and they may be expected to meet the challenge of the future trading environment insofar as it lies within their control to do so.
market requirements than their larger counterparts. All of these should provide encouragement for the smaller enterprise interested in beginning or continuing to export.

7. 4. 39. Management commitment, positive attitudes and perceptions. As we have seen Chapter 5, confirmed by Table 7.1, there has been quite a high level of commitment and continuity shown by exporters in our four samples. And our hypothesis thereon has been supported. There are also clearly some outstanding managers in the knitting sector. But it is likewise obvious that, overall, they have less relevant qualifications and technical education than at least some of their EU15 competitors. It seems clear that this will need to change and, to provide the necessary motivation and enthusiasm, it may be necessary to design proper career paths with worthwhile tailor-made remuneration schemes.

7. 4. 40. Company planning: Though the outcome of our tests were less strong than we would have expected on the basis of the reviews quoted in Chapter 1, we did find support for this hypothesis, in respect of formal export market plans; and there is much evidence in business literature for the benefits of planning generally. In the new globalised world it will surely be, with all sorts of other related activities, really essential to success. Staff skills will also have a key role to play.- and there is a serious shortfall to make good here.

7. 4. 41. Market concentration or market spreading. Although we found strong support, from two survey samples, for the hypothesis that export performance varies directly not only with the number of markets but also with the number of regions, it is clear that there can be no justification for a general recommendation that firms sell to the maximum number of markets. Firms will need to consider carefully various factors including the nature and price of their product, in the context of the size, structure and likely total demand from the retail system into which they intend to sell. Even where a product
requires many markets (as seems likely to be the case for the niche items being recommended by European Union strategists), it may be advisable to use e.g., Operational Research techniques to ensure that the optimum number for the specific firm is not exceeded. (In the 1989 survey, for example, an East Midlands hosiery firm exported only 7 per cent of turnover, but was inefficiently despatching ‘penny-packets’ to many markets worldwide).

7.4.42. Use of international marketing information: Our tests further buttressed earlier findings on the value to export performance of participation in trade fairs and exhibitions. Two suggestions might usefully be made: one is that there is scope for more UK exporters to attend foreign trade fairs; the second is the vital need for a much higher level of formal market research. As has been noted above, the percentage of exporters using this form of research has remained low and remarkably constant over more than 20 years (See Table 7.3). Linking also directly into the formal selection of markets, sound, timely and sufficient export marketing information needs to be used much more widely and professionally if UK knitwear exporters are to meet the challenge of the future.

7.4.43. Formal plus informal market selection: As Table 7.4 shows, the pattern in UK knitting has long been one of the predominance of the informal method of export market selection (though with some slight indication that the balance may be changing in favour of formal. It seems important to appreciate that, while we have found strong support for the use of both methods in unison at present, this may be of only temporary duration. It seems probable that predominantly formal methods will have to become the norm if exporters, in the forecast intensely competitive international market for knitted apparel of the future, are to maximise their prospects for locating the many overseas market niches.

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6 The NEDO report *Dynamic Response* (op. cit., 1987, NEDO, KEDC) recommended special training for sector researchers.
they are likely to need to prosper. That is not of course to suggest that personal contacts with customers should cease. But the likely intensity of future competition and the consequent difficulty the UK will experience in identifying the basis for a sustainable future competitive advantage will surely place a premium on primacy being given to highly professional marketing research – formal selection.

7. 4. 44. Effect of price determination method: While no support has been found above for any effect of the price determination method on export performance, this should probably not be taken as a guide to action in the future savage international marketplace. There are at least three aspects of pricing and/or sales terms that should be considered, as follows: improving all seems likely to enhance export performance.

(a) Cost plus pricing method: Though the pricing method used has not been found, for knitted apparel, to affect exporting performance we have already seen cogent and powerful arguments (Chapter 5) for the disutility of cost-plus as a method. We have noted in this study that it is the method used by over half (51%) of the survey sample. In the future market place it seems certain that more sophisticated methods will be required.

(b) Pricing and invoicing currency: The argument has long been advanced that exporters should make life easy for potential export market customers by pricing and invoicing in the customer’s own currency (to increase the simplicity and appeal of the offer). It has been seen that our sample firms overall have used sterling only, local only and both. Noteworthy, however, is the high proportion (39%) using ‘sterling only’; were these firms to switch to ‘local only’ their competitiveness might well benefit.
(c). Although *franco domicile* sales/ quotation terms are, *prima facie*, the most convenient from the overseas customers’ perspective, the evidence from this study indicates that effective exporters use a number of forms of quotation terms and likewise sales channels. Nevertheless, only 3 per cent of our respondents quoted *franco domicile* terms; and the suggestion is made here that, in an increasingly demanding world market, UK exporters might improve their prospects by switching to this form of quotation, in tandem with other measures; preliminary research might be employed to quantify the scope.

4. 45. Sales Channels: We have found that the number of Sales channels used was significant (both 2000 and 1989) but with small negatively signed betas in MR, while Commission Agent was significant and accounted for a useful amount of variance. There is clearly support for the use of a number of types of sales channel and CA does well here. Nevertheless firms would need to explore which particular mix is best for them and the particular markets they are interested in. CAs are not universally suitable; for example, as long as 30 years ago when we researched the FRG market for apparel, it became clear that signing a contract with a CA there was to commit oneself heavily. Also, there is much existing research on relationships within and between the users of channels and this literature would provide useful briefing on all aspects, to the benefit of firms.

7. 46 Promotional Intensity: It has been seen that, in line with much past research, time spent abroad prospecting for business or promoting products pays handsome dividends in terms of sales performance. (Man days abroad is also highly correlated with number of markets but that could of course work both ways around). There seems clearly to be scope for more visits to overseas markets, which would be beneficial especially for designers and help all to keep in touch with market trends and customers. For example,
nearly a third of survey sample firms got their new orders in UK; and about a quarter of them (all) do no advertising or promotion abroad, nor do they attend trade fairs.

7. 4. 47. Conclusion: These then are the main aspects and issues emerging from this research project where it is considered that the positive findings from the testing of the hypotheses and shortfalls in practices observed in survey sample and earlier sample firms could be exploited to their own advantage by UK knitted apparel exporters who are sufficiently motivated to take on the full challenge of globalisation in this sector of world trade.

This research project’s contribution to knowledge of the knitted apparel sector.

7. 4. 48 It is suggested that this research study has contributed to knowledge in the field of the determinants of effective exporting performance by UK knitted apparel exporters in the following main ways:

- Presented a current picture of exporting in UK knitted apparel;
- Identified apparently serious methodological problems in the literature;
- Supported 7 of 8 hypotheses on determinants of effective exporting;
- Contributed to standardisation of IVs and DVs, as recommended by eg Zou et al.;
- Designed research to compensate for the methodological shortcomings identified;
- Added a longitudinal element, strengthening the analysis through the use of sound data for knitted apparel exports in past years.
- Collected Panel-type data from 8 randomly selected survivors from the 2000 sample.
- Made a very detailed analysis (CH2) of the UK knitted apparel industry, its home and EU15 market, which is available to users of the reference library at UK Fashion.
7. 5. A SUGGESTED DIRECTION FOR FURTHER RESEARCH

7. 5. 1. Further research in the knitted apparel industry

The present study has narrowed down somewhat the range of factors that appear to be determinants of effective exporting in this sector. It might well therefore be worthwhile to conduct further survey research in the sector, which might pursue two aims; one to explore in greater detail the more limited list of predictor IVs that emerged from this study and another to investigate more specifically how some firms in the sector have continued to prosper despite the ever-intensifying onslaught on their home and export markets by low cost imports. This might also cast further light on whether the Resource-Based or Industry Organisation theory is the more appropriate for this industry. It will be recalled that we expressed reservations when choosing the former to guide this research (Chapter 1). A possibly useful preliminary exercise might be to investigate further the similarities and differences between higher and lower intensity exporters using our 2000 survey sample data. Although it was not directly part of the research methodology, we split the sample database at the 25 per cent export ratio level and compared the means of 27 variables of interest. The differences were in the majority of cases found to be highly significant and it would be interesting to investigate why (See Annex 8).

7. 5. 2. Cross-sectoral variability

In Chapter 1 and Annex 1 we have argued that, in empirical research no account appears to be taken of unknown and unquantified variability that affects the comparability of data in cross-sectoral surveys. We have also suggested that such ‘apples and pears’ data may well undermine the external validity of such cross-sectoral samples, offsetting in whole or part the advantage of greater generalisability that is sometimes claimed for this more macro approach. It would appear that there are persuasive grounds for believing that a properly designed research project on this topic might pursue
two worthwhile objectives: to establish if the perceived problem is a real one; and, in this event, to make recommendations for overcoming it e.g. methods of weighting sampling units in the different sectors to bring them onto a standard basis for comparison.

7. 5. 3. Company size and export performance: Although this hypothesis has been tested frequently, there is a possibility that more research could be beneficial. This might possibly begin by focusing on the methodologies of past studies of the topic, especially whether the various assumptions made were realistic and if enough factors were considered in each case. A rewarding approach might be to match large and small firms on a sufficient number of factors before making the comparisons. Meantime, our failure to find support for this hypothesis in knitted apparel should be motivational for smaller firms; as should the fact that some of the very well-known firms in the industry which have gone bust were not noticeably well-managed—of which size is no guarantee.

7. 5. 4. Non-Response Tests: We expressed some concerns in Chapter 3 especially about the apparent general failure of non-response tests to find differences among non-respondents, notwithstanding the lowness of response rates and the advice of the textbooks. It was also suggested that there was a risk of conferring respectability on badly flawed research. It might be worthwhile to conduct rigorous assessments of existing tests with the aim of establishing the extent of their reliability.

7. 5. 5. Rationalising existing research: The third suggestion is more radical: it is that an effort be made to rationalise existing empirical research studies in this field. This might perhaps be done in three stages. The first would be to split off from the literature all single sector studies, to assess all for soundness of methodology and to use those that pass muster to ascertain what weights or other adjustments would be needed to enable generalisations
to be made across all. Next, scholars would be encouraged to conduct new single sector studies with a high methodological standard to add to the single-study database. Meantime, efforts could continue to ascertain if there is any way and if so how, to extract reliable findings from the existing collection of multi-sector empirical survey studies.
Chapter 7: Semi-Annex: Tables

The six tables below set out sample data for 4 different years that relate to the variables used to test our hypotheses.

Table 7.1. Management’s Export Commitment: 3 Measures, 4 Years (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Continuous Exptr.</th>
<th>Committed Export Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1988</td>
<td>95</td>
<td>5</td>
</tr>
<tr>
<td>1989</td>
<td>93</td>
<td>7</td>
</tr>
<tr>
<td>2000</td>
<td>86</td>
<td>14</td>
</tr>
<tr>
<td>2007</td>
<td>100</td>
<td>-</td>
</tr>
</tbody>
</table>

Table: 7.2 Sample Firms’ Planning Activities: 4 Years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Formal Exp Mkt Plans</td>
<td>75+</td>
<td>25</td>
<td>-</td>
<td>53</td>
</tr>
<tr>
<td>Export Sales Forecasts*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Analyse Expt Profitbly</td>
<td>80</td>
<td>20</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Designs For Exports</td>
<td>45</td>
<td>35</td>
<td>20</td>
<td>-</td>
</tr>
</tbody>
</table>

(* This question was first posed in 2000- and repeated in 2007;
+ High proportion may reflect mainly deliberate selection of high intensity exporters.

Table: 7.3. (%) Usage of Main Export Market Information Sources. Mean per firm

<table>
<thead>
<tr>
<th>Source .1. F.Cust. 2. S/Chs 3. PVCS 4. TFE 5. FMR</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 (%)</td>
<td>76</td>
</tr>
<tr>
<td>Firms: (71)</td>
<td>(71)</td>
</tr>
<tr>
<td>1989 (%)</td>
<td>77</td>
</tr>
<tr>
<td>Firms: (29)</td>
<td>(29)</td>
</tr>
<tr>
<td>1988 (%)</td>
<td>95</td>
</tr>
<tr>
<td>Firms: (20)</td>
<td>(20)</td>
</tr>
<tr>
<td>2007 (%)</td>
<td>-</td>
</tr>
<tr>
<td>Firms: (8)</td>
<td>(8)</td>
</tr>
</tbody>
</table>

Notes: 1,2=: Feedback from Final customers, sales channels: =3,4 Personal visits to Customers stores or Trade fairs: 5 = Formal market research. :

Table: 7.4. Market Selection Methods: Practices In Different Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Sample type</th>
<th>Formal</th>
<th>Informal</th>
<th>Both</th>
<th>N/Response (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>Non-Random (20)</td>
<td>5</td>
<td>80</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>1989</td>
<td>Random (30)</td>
<td>0</td>
<td>83</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>2000</td>
<td>Random (71)</td>
<td>6</td>
<td>66</td>
<td>28</td>
<td>-</td>
</tr>
<tr>
<td>2007</td>
<td>Random (8)</td>
<td>12</td>
<td>63</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>
Table: 7.5: Firms with < and > 10 markets: Comparison of export ratio means

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 sample:</td>
<td>Mean export ratio 69.88</td>
<td>Mean export ratio 58.00</td>
<td>0.1479</td>
</tr>
<tr>
<td>1989 sample</td>
<td>Mean export ratio 11.31</td>
<td>Mean export ratio 55.64</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>1988 sample</td>
<td>Mean export ratio 13.63</td>
<td>Mean export ratio 63.17</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

Table: 7.6. Sample firms’ price determination methods in different years

<table>
<thead>
<tr>
<th></th>
<th>Cost plus</th>
<th>Market Based.</th>
<th>Both</th>
<th>N/R (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>60</td>
<td>27</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>2000</td>
<td>51</td>
<td>28</td>
<td>21</td>
<td>-</td>
</tr>
<tr>
<td>2007</td>
<td>63</td>
<td>25</td>
<td>-</td>
<td>12</td>
</tr>
</tbody>
</table>

The continuing predominance of the cost plus method is apparent from data from the knitting exporters year-samples. (Table 4.29 includes fuller information). Of the 10 1988 responses to this question 7 were using cost plus and 3 market-based methods.