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**AN EMPIRICAL ANALYSIS OF COMPETITIVE ADVANTAGE IN UK
RETAILING: IMPACT OF THE EXTENDED RBV ON THE MARKETING
CHANNEL FOR WHITE GOODS**

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Thesis submitted to the University of Nottingham
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ABSTRACT

AN EMPIRICAL ANALYSIS OF COMPETITIVE ADVANTAGE IN UK RETAILING: IMPACT OF THE EXTENDED RBV ON THE MARKETING CHANNEL FOR WHITE GOODS.

This dissertation accomplishes several tasks. First it surveys the literature in the resource-based theory of a firm and retailing for establishing the vital links necessary for firm heterogeneity in the retail channel for white goods. The review depicts not only the various dimensions of the concepts of resources, capabilities and competitive behaviour on competitive advantage but also the specific organisational/inter-organisational and strategic adaptation capabilities that direct some firms to outperform other firms in this retail channel.

The empirical analysis for testing competitive advantages included a main survey analysis that consisted of all retailers and another for the small retailers. A model was constructed to diffuse simultaneously the critical resources, capabilities and competitive behaviour to competitive advantages pertaining to this retail channel in the UK. Furthermore, this method of linking and ranking of key resources and capabilities to competitive advantages is expected to encourage managers to leverage existing resource positions into superior future positions. Additionally it is also expected to help regulators address competitive issues accordingly.

The results indicate that in this retail channel competitive advantages were associated to key resources and key capabilities. In this study the linking of strategic adaptive capabilities to key resources highlight retailer branding enhancements from non-

product activities. These non-product activities were a basis for setting *ex ante* limits to future competition in this retail channel.

The outcome of the analysis illustrates that efficiency and/or effectiveness of outlets (key resources) were subject to delivery of customer values from product portfolios that increased market shares (proxy for competitive advantage) for the retailer organisations. This study also demonstrates how retailer outlets became a source of competitive advantage by fulfilling the conditions of value, rarity, inimitability and in-substitutability.

Finally, this study also reviews the current retail structure of this retail channel to understand why it could be efficient and effective than its counterparts in Europe. The result of the two surveys suggests some evidence of imperfect competition and directs attention not to the concentration of firms but to the imbalances of outlet classes prevailing in this retail channel. Moreover this study also reveals that the number of small retailer outlets prevalent in this retail channel may indirectly control to a certain degree the extent of the advantages of economies of scale/scope that is available to the larger retailers.

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Chapter 1

Introduction

1.1 Overview

The proclamation that resources and capabilities of a firm are the sources of abnormal rent generation and sustainable competitive advantage is a resource-based view (RBV) of strategic management (Wernerfelt, 1984; Barney, 1986; Amit and Schoemaker, 1993). Several researchers have examined and contributed to this theory which has an 'inside-out' view compared to Porter's 'outside-in' view (Mintzberg *et al.*, 1998). It is an internal focus within which a firm looks to exploit the properties of its resources and strategic factor market imperfections.

Although the RBV has been the centrepiece in recent literature, its application in industry has raised uncertainty in its current framework. RBV appears to have failed to demonstrate how firms make or do not make rational resource choices in the pursuit of economic rent and/or sustainable competitive advantage (Oliver, 1997). This may be due to the difficulties associated in the identification and measurement of valuable resources and capabilities of an industry's specific assets, as there are a few empirical studies based on this perspective at present. The dissatisfaction of the current frameworks seems to point to possible ambiguities associated with firm's resources and the equation of strategic advantages with organisational uniqueness (Mintzberg *et al.*, 1998). Oliver (1997) also states that resource based researchers have not gone beyond resource properties and resource markets to explain firm heterogeneity.

On the other hand, some researchers were calling for organisational based theory of competitive advantage (Barney and Zajac, 1994), and a convergence between

Institutional theory and RBV (Rao, 1994). A paper on dynamic capabilities (Eisenhardt and Martin, 2000) concluded that traditional RBV misidentifies the locus of long term competitive advantage in dynamic markets. Recently the RBV came under further attack. Priem and Butler (2001) state that RBV is tautological and argue that the external determination of value as defined by Barney (1991) is enough by itself to limit RBV's prescriptive ability for practitioners. Coincidentally despite this attack, in the recent past many theorists have assessed the impact the diffusion of RBV has had on the field of strategy and cognate business activities and have reacted positively. The growing popularity of RBV linked with entrepreneurship (Alvarez and Busenitz, 2001), marketing (Srivastava, 2001) and economics (Lockett and Thompson, 2001) is to name just a few and an opportunity presents itself here to link retailing with RBV.

In retailing Dobson and Waterson (1996) state that the influences of small independent establishments have substantially diminished in recent times as the exploitation of economies have led to a few firms controlling a considerable slice of the market. A recent study by Miller *et al.* (1999), however, implies that there are mutually beneficial relationships among different types of retailers rather than an overwhelming competitive advantage for larger stores. Finally, in the MMC investigation in 1995, it was claimed that the retail channel for white goods was much more efficient than its counterparts in Europe (MMC 1997, Volume 11, pp.109). This study provides the opportunity to test this claim by probing into the structure of this retail channel and its workings.

1.2 Aim of study

Based on the positive impact the diffusion of RBV has had on the field of strategy and cognate business activities it was appropriate to look beyond a singular view using

multiple theoretical approaches to extract the richer descriptions of organisational actions, their antecedents, and their consequences (Gray and Wood, 1991). Encouraged by this thought I have set about to test competitive advantage in a specific retail channel that links RBV to retailing for explanations for firm heterogeneity in terms of firm efficiencies and effectiveness. A resource based view of a firm claims competitive advantage as an offshoot of the reaction caused by a team of deployed resources that produce unique capabilities of corporation and co-ordination within such teams (Grant, 1991).

In order to investigate firm differences, two separate analysis will be conducted on key resources and key capabilities related to the retail channel for white goods in the UK. The analysis for the main survey will include all retailers followed by another for the small retailers with less than 5 outlets. This will be followed by testing competitive advantage in which a model will be proposed to facilitate not only the inclusion of key variables predicted by RBV but also variables relating to retailing. For this retail channel I propose that resources and capabilities are associated with competitive advantage.

The research questions are therefore:

- a) Is competitive advantage in the retail channel for white goods associated with key resources and capabilities?
- b) Does the ability of the key resource(s) to manipulate other resources and capabilities result in product portfolios that maximise returns and/or increase market shares for its shareholders?

The testing of the association of competitive advantages with resources and capabilities will be based on the following premise. A firm is said to have competitive advantage when it is implementing a value creating strategy not simultaneously implemented by current or potential competitors (Barney, 1991). Firms become efficient and effective from firm activities driven by key resource(s) and facilitated by

organisational relationships that manipulate firms resource bases ensuring the potential for the key resource is fulfilled over time. In this retail channel, the delivery of customer values is connected to holding product portfolios that maximise returns and/or increase market shares for the shareholders. Market shares are used as a proxy for competitive advantages in this study. Value maximisation of key resources is internal to the firm and increases over time, subsequently making outlets valuable, rare, inimitable, non-substitutable, non-transferable, and highly marketable.

The model developed in this study is driven primarily by firm key resource(s) and is set on the following premise: competitor strategies and the origins of competitor behaviour depict why firms are where they are today and how they got there. Strategy implementations are steered by both organisational and inter organisational relationships and are path driven.

To develop strategic assets firms require working capital. The elements of working capital provide short-term resources and the activities i.e. strategic adaptation capabilities, within the composition of working capital may be related to the product and/or non-product activities of the firm. These activities have the potential for setting *ex ante* limits to future competition.

Furthermore, one of the conclusions of the 1969 MMC report on RRP (recommended retail prices) was that the recommendations of resale prices, in conjunction with factors such as restriction of outlets and monopoly in the supply industry, might prevent price competition in retailing (MMC 1997, Vol.1 pp.49). This study intends to review the current retail structure not in terms of concentration of firms within this retail channel but in terms of outlets in order to verify the 1969 MMC recommendations on the restrictions of outlets.

White goods were chosen in preference to electrical goods for various reasons. White goods are the largest product line with a turnover of about £2.2 billion pounds within the total domestic appliance market. The total turnover of this market was about £2.8 billion pounds in which about 80% were accounted by white goods. White goods are household appliances that include home laundry products, cold storage products, cooking products and dishwashers. However the retail channel for white goods is also the channel for brown goods and some retailers trade in both product lines.

Furthermore, the Chicago approach considers retailing function to be basically perfectly competitive. However, Dobson and Waterson, (1996) contend that perfect competition is not evident in most areas of retailing and that market power in a limited form is the more likely norm. They further state that the sources of market power are: barriers to entry, economies of scale / scope, national / local market power and retailer differentiation of services. Therefore the use of white goods may serve the purpose of testing whether the domestic appliance market is perfectly or imperfectly competitive bearing in mind that white goods are the largest product line accounting for nearly 80% of the total domestic appliance market. Likewise other markets could also be tested for the type of competition that prevails by comparing the results against the model of perfect competition.

Moreover if the sources of market power were detected i.e. especially economies of scale/scope it may present an opportunity for other retailers to enter this retail channel in order to take advantage of these benefits. This may be beneficial to competition on the whole. Additionally, white goods, is not the only product line that flows through this retail channel. The composition of electrical goods contains both white and brown goods and the retailers could be participating in both to utilise the synergies triggered by their shared resources and capability profiles. Therefore the retailer selection of an efficient

and effective portfolio of product lines feeding different markets could result in multiple economies of scale/scope. Hence this dichotomy is expected to reveal whether the retailers could exploit multiple economies of scale/scope in a retail channel. The understanding of white goods retailing may be a stepping stone for better understanding of electrical goods retailing in the UK.

Finally, the empirical analysis in the retail channel for white goods and use of the extended RBV initiate the opportunity to investigate how the current market leaders arrived and maintained their market positions in this retail channel. *Dixons* and *Comet* have held on to their market positions for over a decade. The study of their resources and capability profiles together with those of other retailers may also contribute towards understanding how competitive advantage is sustained in a retail channel.

1.3 Contribution

It should be emphasised from the outset that this study offers a partial analysis of the resource based view of firms in an industry. It does not purport to examine the resources of firms collectively operating in an industry instead it looks at resources of firms applied to the retail channel in an industry. Thus this study nevertheless attempts to stretch the understanding of the RBV by linking competitive advantage with resources and capabilities relevant to the retail channel for white goods. The inclusion of the organisational perspective within the RBV indicates that it is empirically valid and non-tautological as it illustrates that resource values are internal to the firm and were subject to managerial manipulation of other resources and capabilities.

A model was constructed to diffuse simultaneously the critical resources, capabilities and competitive behaviour to competitive advantages pertaining to this retail channel in the UK. This model was put to the test via two individual surveys i.e. the main

survey and the small retailer survey. The results of both surveys were facilitated by the *SPSS* and *LIMDEP* software packages. Five out of the nine hypotheses were significant. The linking and ranking of key resources and key capabilities to competitive advantage is expected to encourage managers to leverage existing resource positions into superior future positions (Winter, 1995; Dierickx and Cool, 1989), but also help regulators to address competitive issues accordingly. Additionally it is also expected to help regulators address competitive issues accordingly.

This study demonstrates that for sustaining competitive advantage the implementation of a value creating strategy that is not simultaneously implemented by current or potential competitors is important. These value creating, strategies correspond to the prevailing market structure at that time. Furthermore it also highlights the conditions and namely the linking of value, rarity, inimitability and insubstitutability factors that are essential for a resource to be a source of competitive advantage. This study provides the evidence that the retail channel for white goods is primarily driven by key resources and supplemented by inter organisational and organisational capabilities. Moreover the key resources were the outlets and traces of imperfect competition were detected in this retail channel.

For outlets to be valuable in this retail channel, superior firms had to have the capacity to display and deliver customer values. Effective and efficient capacity utilisation of outlets equates to delivering customer values from product portfolios that maximise returns and/or increase market shares for retailer organisations. For the large retailers exclusive deals were important as it ensured economies of scale/scope, whilst for the small retailer the listing of efficient product portfolios was significant.

Two of the four strategic adaptation capability variables were tested: namely, third party credit card usage; and promotions displayed heterogeneity between firms and their

linking with resources demonstrated the enhancement of retail branding from non-product activities. These non-product activities depicted how *ex ante* limits to competition were set in this retail channel.

The competitor behaviour variable age explained the importance of early mover advantages and the location effects for the small retailers. The analysis indicated that several small retailers (r-strategists) had occupied the product market space earlier, followed by the entry of the current market leaders i.e. national multiples (k-generalists) latter into the retail channel. Moreover the strategies of quicker deliveries were more important to smaller retailers.

Finally, this study reviewed the current retail structure of this retail channel here in the UK to understand why it could be efficient and effective than its counterparts in Europe. The result of the two surveys suggests some evidence of imperfect competition and directs attention not to the concentration of firms but to the imbalances of outlet classes prevailing in this retail channel. Moreover, this study also reveals that the number of small retailer outlets prevalent in this retail channel may to a certain degree control the extent of the advantages of economies of scale/scope that is available to the larger retailers. Furthermore, based on the results of this study, it is questionable whether the 1969 MMC recommendations on the restrictions of outlets still stand.

1.4 Test Area

I intend to test competitive advantage by analysing firstly the white goods industry in the UK. The white goods industry is a mature industry dealing in domestic appliances. The appliances are said to be mature and continual improvements are made on reliability, usage and appearance of these products. Appliances manufactured are sold mainly through retailers. The structure of the suppliers mirrors that of the retailers i.e. few

retailers/suppliers hold major market shares. There is excess capacity in this industry and is believed to be a deterrent for new entrants into this industry.

The area tested is the retail channel for white goods in the UK, where white goods are specified as electrical goods. The use of white goods as a single trade line is consistent with previous research. Retailing is a very competitive and any successful innovation or exploitable differential advantage is quickly analysed, avoided and/or adopted by rival retailing concerns (Oliver, 1990).

1.5 Organisation of thesis

Chapter 2 is an industry analysis chapter that ponders on research design and is intended to direct the researcher towards a choice of research strategy required for the present study. The focus will be on the research question in hand, the possible degree of investigator control and the contemporary events. This chapter contains information on the structures of both the white goods industry and the retail channel for white goods followed by sections that describes the rules and options open for competitive behaviour in the retail channel for white goods.

Chapter 3 reviews the literature and lays the theoretical foundations that links RBV with retailing. The main purpose of this chapter is to highlight the researchers understanding of the interplay between competitive advantage and its main components, namely resources, capabilities, and competitive behaviour in the retail channel for white goods. In this chapter, nine hypotheses will be proposed to facilitate the testing of competitive advantages in this retail channel.

Chapter 4 explains the methodological and empirical considerations. This chapter describes how the research was conducted and implemented together with some justifications of the approach used in this survey. The contents of this chapter also

describe how data and measures of data were selected establishing links with the retail channel, the results and analysis chapters. Furthermore in this chapter a model will be constructed to diffuse simultaneously the critical resources, capabilities and competitive behaviour to competitive advantages. This model is expected to facilitate the testing of the associations of competitive advantage with key resources and capabilities pertaining to the retail channel in the UK

The results and analysis covered in chapter 5 contemplates on multiple regression analysis of the variables selected for analysis. A confirmatory model inclusive of all the independent variables will be tested using *SPSS* in the first instance to test the effects of the overall model fit before and after any violations for the main survey as well as for the small retailer survey. The results will then be validated using *LIMDEP* selected for its inbuilt facility to adjust for issues relating to heteroskedasticity. The significance/insignificance of the variables selected is expected to demonstrate the associations and also their ranking with competitive advantages.

The final chapter 6 is directed mainly to discussions of the findings of the enquiry. The survey has attempted to demonstrate how firms can make resource selections using RBV and the importance of organisational influences that manage these resource decisions in their search for competitive advantages. In this chapter the use of the model constructed for this survey will also be put to the test in addressing some of the issues raised in the MMC survey of the suppliers of white goods. The limitations of the study together with the managerial implications and recommendations for future research will draw the thesis to a close.

Chapter 2

Industry Analysis

2.1 Introduction

The area tested is the retail channel for white goods in the UK, where white goods are specified as electrical goods. Retailing is a very competitive and any successful innovation or exploitable differential advantage is quickly analysed, avoided and/or adopted by rival retailing concerns (Oliver, 1990). It is an important channel in which the linking of RBV and retailing can give insights to how firms go about transforming their resources and capabilities into competitive advantages.

The industrial organisations dominant paradigm, known as structure-conduct-performance (SCP), suggests that a firm's performance is the result of competitive interaction. The conduct of firms in an industry is determined by the structure of the industry, which identifies a set of industry conditions that impact on behaviour and performance of firms. The SCP nevertheless separates competition from competitors but RBV suggests that the structural features of an industry are the results of the organisational capabilities of its constituent firms, which have accumulated over time (Cockburn *et al.*, 2000). For this study, the linking of RBV, SCP and retailing brings together the firms value creation processes in a retail channel in which the identification of strategic investments that activate these internal activities are imperative for firm heterogeneity.

The aim of this study was to demonstrate the associations of resources and capabilities with competitive advantage in a specific retail channel. The research questions for this study were identified as:

-
- a) Is competitive advantage in the retail channel for white goods associated with key resources and capabilities?
 - b) Does the ability of the key resource(s) to manipulate other resources and capabilities result in product portfolio's that maximise returns and/or increase market shares for its shareholders?

In order to achieve this objective it is necessary to explain firm heterogeneity in terms of firm activities that lead to firm efficiencies/effectiveness. This chapter contains the information needed for research design in which factors (variables) relevant to both large and small retailers would be considered. Factors can have a range of values and can be examined at many levels. If all the factors are varied across the same number of levels, the research design will be simpler. In this study an opportunity presents itself to conduct two surveys i.e. one for the whole population and one for the small retailers. This approach was thought to be important as competitive advantages may be appropriate to local markets and furthermore the understanding of the survival patterns of small retailers was also important for this study.

The selection of the response variable is crucial. Care should be taken to ensure that the selected response variable provides useful information about the process under study. This chapter contains information that has direct links to methodology, results and analysis chapters. Initially it also identifies the structures of the white goods industry and the retail channel for white goods followed by the description of the rules that govern the behaviour of participants and the options open for competitive behaviour in the retail channel for white goods. Furthermore, the research design results will be analysed in this study by using established statistical methods to draw objective conclusions rather than subjective ones. This means the qualities of statistical conclusions will depend on the quality of the information extracted from the research itself.

Most of the information relating to the retail channel for white goods was obtained from the extensive research material produced by The Monopolies and Mergers Commission (MMC1997, Volume 11) report on the supply of Domestic Electrical Goods in the UK. The domestic electrical goods considered in this study are washing machines, tumble dryers, dishwashers, cold food storage equipment, cookers and microwave ovens. The information relating to warehousing was obtained from the databases of a large supplier. Whilst some information produced below may have changed, every effort has been made to keep it up to date where possible.

2.2 The nature of the arena in which the competitive activity takes place

2.2.1 Industry background

Individual firms may own the resources that grant market power. A prerequisite for market power is barriers to entry (Grant, 1991). A firm's market share will not only indicate its relative powers, but also indicate the time span and the resources and capabilities required for reaching desired heights. In this retail channel scale economies and experience advantages may be significant contributors to competitive advantage and it is imperative to understand the structure of the retail channel concerned.

The process for determining efficiencies and/or effectiveness internal to the firm is nevertheless subject to some rules. The industry regulations give rise to what options there are for competition in this retail channel. The structure-conduct-performance (SCP) paradigm suggests a firm's performance is the result of competitive interactions and that the conduct of firms is determined by the structure of the industry where a firm competes and identifies a set of industry conditions that have impacts on both behaviour and performance of firms.

The conduct is determined by the structure of the industry where the firms compete. Conduct is based on the decisions made by an individual firm on, for example, prices, building capacity, advertising capacity and the investments in research and development. The structure is measured by the properties of the industry, which for example, are number and size of firms (concentration), advertising intensity, capital intensity, concentration of suppliers and customers, the extent of product differentiation and barriers to entry.

The environment could suit a dynamic market, a moderately dynamic market or a volatile market. In each of these markets, firms compete to achieve competitive positions in order to earn superior profits and/or increased market share through a single strategy i.e. cost focus, product differentiation, market focus or a mix of strategies. Therefore in order to capture a customer base, each firm would choose a strategy based on its foundations (Stinchcombe, 2000) and/or gain competitive position based on a selected strategy or a mix of strategies applicable for both current or future environments (Cockburn *et al.*, 2000). The r-strategists enter a new resource space at an early stage when few firms are present in the product-market space. They are flexible and inefficient due to lack of experience, whereas k-generalists join later after several r-strategists have entered a new environment. The k-generalists enter this new environment with their extensive experience and exploit their advantage of greater efficiency.

2.2.2 Retail Channel for White Goods

The sampling frame in this study relates to the retail channel for white goods. Retailing is a very competitive and highly imitative industry in the UK, and any successful innovation or exploitable differential advantage is quickly analysed, avoided

and/or adopted by rival retailing concerns (Oliver, 1990). White goods are sold mainly through retailers and are an important intermediary in the UK.

There are many categories of electrical goods retailers. Some specialise in electrical goods, whereas for others, electrical goods are only a small part of their turnover. There is also a small second hand goods market, which is also dealt through retailers. Electrical goods specialists include a relatively small number of national and regional multiples and a large number of small retailers. The retail operations of regional electric companies (*REC's*) are also included here as they represent an important retail channel. Retailers offering brown goods only to the public are not considered in this study. Some retailers also sell small domestic appliances, whilst diversifying into newer segments such as telecommunications products, computer hardware and software, and video games. The number of retail businesses and outlets in the UK selling reference white goods in 1995 are displayed in Table 2.1.

Table 2.1 Retail Channel Structure

Multiple Retailers	No.of Businesses	Market Share %	No. of Outlets
Dixon	1	21	386
Comet	1	11	229
REC'S	8	25	863
Other specialist multiples	22	9	1048
Non specialist multiples	16	9	853
Total multiples	48	75	3379
Small retailers	3600	25	5100

Source: MMC (1997)

Therefore, in order to test firm efficiencies and/or effectiveness it is necessary to draw boundaries so that those firms competing in this product-market space can be captured. A collection of firms with similar activities in this allocated space thus forms the retail channel structure and is described below.

National multiples

There are only two specialist electrical goods retailers with operations across UK.

Dixons Group plc

Dixons was incorporated in 1937 under the name *Dixon Studios Ltd*. The original business was in portrait photography. In the mid 1940s the main activity was the retail sale of photographic equipment and optical products. The company gained listing on the London Stock Exchange in 1962 and expanded rapidly through organic growth and acquisitions, diversifying into audio and television, extending its range into VCRs, hi-fi, microwave-ovens, computers and other electronic products.

In 1984 *Dixons* acquired *Curry's Group plc*, a national retailer of white and brown goods and *Mastercare Ltd (Mastercare)*, its servicing subsidiary. In 1988 it bought *Wigfalls plc*, a chain of 106 electrical stores mainly in northern England, which were then integrated into the *Dixons and Curry's* organisations. In 1993 *Dixons* sold its retail operations in the USA and its UK property divisions, leaving a European property division and UK retail division. The main arm of the UK Retail division is *DSG Retail Ltd (DSG)* which is the principal operating division. *DSG* operates the *Dixons* and *Curry's* stores and has limited mail order operations made under the names of *Partmaste*, and *Dixons Direct*. *DSG* also owns the *PC World* and *The Link* chains selling computer and telecommunications products. The other operating units include *Mastercare*, which

provides a repair and after-sales service for products supplied by *DSG* stores and *Coverplan Insurance Services plc*, which provides extended warranty insurance and manages consumer credit. *DSG (Far East)* provides quality control for exclusive brands supplied by Far Eastern suppliers.

In 1995 there were 353 *Dixons* high street stores which did not stock white goods and is expected that they will remain as a high street store for many years carrying out personal electronics sales. There were 386 *Curry's* stores of which 195 were in the high streets and 191 out of town in Great Britain and Northern Ireland. The market was developing for out of town stores as customers wanted choice and hence the space to display a variety of models has increased. *Curry's* carry both white and brown goods. 19 warehouses service both chains, and a central department within *DSG*, has responsibilities for buying, advertising, merchandising, security etc. There was also a single management information system, a common distribution network and integrated after service support. Bulk purchasing backs supply arrangements. *Dixons* has one own-label reference white goods brand - *Nova Scotia* (CFS products), and home-laundry products manufactured and sold under the *Curry's* label.

Comet Group plc

In 1933 *Comet* began as *Comet Battery Service (Hull)* renting out charged accumulators for radio receivers. It then moved on into the sale and rental of radio-sets and televisions. The main purpose of *Comets* activities was aggressive price discounting backed up by extensive advertising. *Comet* was the pioneer of the edge of town discount stores.

In 1983 it was selling the full range of white and brown goods from 180 warehouses, making it the largest retailer of domestic electrical goods ahead of *Curry's*.

In 1984 *Kingfisher* then known as *Woolworth Holdings* acquired *Comet*. The acquisition of other multiple retailers such as *Ultimate* in 1987, *Connect Chain* in Northern Ireland in 1988 and *Laskys* in 1989 reinforced *Comet's* activities, thereby enabling it to be the second largest UK retailer of electrical goods after *Dixons*. *Comet* is one of the principal subsidiaries of *Kingfisher*, which is also the parent company of *B & Q plc* and operates the leading chain of DIY centres in the UK and stocks some white goods. In 1993 *Kingfisher* acquired *Etablissements Darty et Fils SA (Darty)*, the leading specialist retailer of domestic electrical goods in France. This enabled *Kingfisher* to become the second largest specialist domestic electrical retailing group in Europe. *Darty* and *Comet* are managed as separate entities because of differences in product specifications between the UK and France and there is little common purchasing between the two entities. In 1996 *Comet* purchased *NORWEB*, and integrated some of *NORWEB's* out of town stores with its own facilities. *NORWEB's* 57 high street shops were closed as a result of this deal. *Comet* has moved away from sales proposition based purely on discount prices and offers not only white and brown goods but also telecommunications and computer products.

Comet has supply agreements, which gives it exclusive use of brand names in the UK and exclusive distribution rights for products. *VestFrost* and *Blomberg AG* supply products under their own names. There are also other arrangements regarding supply with the option that some manufacturers retain the right to sell the same product under different brand names to other UK customers. There are 3 warehouses to store *Comet's* bulk purchases.

The Regional Electricity Companies (REC)

The structure of *REC* is important to all suppliers because of the *Electra* brand it owns through *Electra Brands Ltd (EBL)*. Each individual shareholder is free to

commission products under the *Electra* brand and orders them directly from any supplier. *EBL* has the power to reject an application to become an *EBL* licensee and a shareholder based on material change in the ultimate control or ownership of the user.

Before privatisation there were *12 English and Welsh Regional Electricity Companies, the 2 Scottish Electricity Companies and Northern Ireland Electric Companies (NIE plc)* and they all had retail operations. The *REC's* refer to these retail operations and also to those companies that acquired the businesses of regional companies.

The retail outlets of the regional companies were set up for two purposes:

- a) to sell appliances that consumed large quantities of electricity and,
- b) to act as payment centres for electricity bills.

These premises were situated mostly in traditional high street locations and a few in out of town locations. The *12 regional electricity companies in England and Wales* were privatised in December 1990 followed by the two *Scottish electricity companies* in April 1991 and *NIE* in June 1993.

After privatisation, these quoted companies came under increased pressure to improve their financial performance, which led to reviewing their retail operations. The *RECs* product ranges resembled those of electrical retailers and their income from their affiliated supply businesses was thereby reduced or removed. Several *REC's* expanded their retail operations into additional out of town locations and beyond their traditional boundaries, which were the authorised areas designated in their *Public Electricity Supply licence*. This expansion was facilitated by the acquisition of retail operations of other *RECs* in their territories and a few mergers. The overall result was that only a few prospered whilst others withdrew from retailing electrical goods altogether.

ScottishPower expanded by acquiring superstores from other retailers which were in either liquidation or were withdrawing from electrical goods retailing altogether. These acquisitions led to 75 shops and 17 superstores trading as *ScottishPower* in Scotland and 46 superstores trading as *Electricity plus* in England and Wales.

NORWEB expanded its operations by opening new out of town stores moving outside the borders of its parent's authorised area to cover the Midlands, Yorkshire and parts of the Southeast. In 1995 *South Western Electricity plc* withdrew from retailing and *NORWEB* acquired part of its business with 18 superstores and 16 high street shops thereby coming closer to covering the whole of England and Wales. In 1995 *NORWEB* was acquired by *Northwest Water plc* and from 1996 the combined company traded as *United Utilities plc*. In November 1996 *United Utilities* sold the loan portfolio to *Lombard Tricity Finance Ltd* and then sold the rest of the business to *Comet*.

Southern Electricity plc, and *Eastern Electricity plc* merged their retail operations into *Powerhouse* in April 1992. A year later *Midland Electricity* was also merged into *Powerhouse*. The operation losses at that time led the parents to put it up for sale in June 1995. *Hanson plc* acquired *Eastern Electricity* and also bought the interests in *Powerhouse* of Southern and Midland and soon afterwards they announced their intention to close 195 of the 317 stores. In June 1996 a management buy out team acquired the remaining 122 stores in the Midlands, Southern and Eastern England.

Powerstore was formed in 1993 through the purchases of 14 stores from *London Electricity plc*. It also acquired the concessions, which were being operated inside 45 *Debenham* department stores, but these were terminated 10 months later. In 1993 *Homepower Retail Ltd* was formed from the acquisitions of the retail operations of both *Yorkshire Electricity group plc* and *East Midlands Electricity plc*. In 1995 *Homepower Stores Ltd*, a newly formed subsidiary of *Powerstore*, bought the electrical goods retailing

business and the assets of *Homepower Retail Ltd* and in April 1996 both *Powerstore* and *Homepower Stores Ltd* went into administration.

SEEBOARD plc has retained a retail operation, closing quite a few high street stores and opening 15 out of town superstores. Only the retail businesses of *Northern Electric plc* (*NIE Retail Ltd* trades as *ShopElectric*), and *SHE* have continued with little change.

Scottish Power is the biggest Electricity Company in the UK in year 2000, followed by *Powerhouse*. They are the third and fourth largest retailers of white goods in the UK. Both electricity companies participate in bulk buying and have 4 and 3 warehouses respectively.

Regional multiples

These are specialist electrical goods multiples with outlets in particular regions. They have significant market shares in the areas they operate. The largest are *Tempo* and *Miller Bros*. Other important regional multiples include *Bennetts (Retail) Ltd*, a subsidiary of *Berry's Group Ltd*, operating from Norwich, *Hughes (Lowestoft) Ltd*, and *Apollo 2000 Ltd.*, both operating from Birmingham.

Tempo

Tempo is the trading name of *KF Group plc's* retail operation. In 1996 it had 8 high street stores and 22 superstores mostly located in the Southeast. Stores are also located in the Midlands and the South. *Tempo* sells both white and brown goods whilst having a high proportion of computers in its product mix. *Tempo* however went into liquidation in 2001.

Miller Bros. (Doncaster) Ltd

Miller Bros. is a family owned business based in Doncaster operating from 16 superstores and one high street site. Most of its outlets are located in Eastern England and the East Midlands. They sell both white and brown goods and they specialise in carrying a wide range of white goods. EPOS systems are used in all stores, which are not integrated with its accounting systems. This means extracting turnover details by products is difficult.

Other Retailers

The other outlets, apart from the specialist, are *Retail Co-operatives, Department stores, Mail Order companies and Specialist dealers in built in units and DIY specialists.*

Other Multiples

Retail co-operatives

The *Co-operative Wholesale Society Ltd (CWS)* is the provider of buying, marketing, distribution and other services to co-operative retailers. *CWS* also operates its own retail outlets, of which about 45 outlets stock white goods and is the largest co-operative retailer in the UK. Several independent societies also sell white goods but purchase stock from *CWS*, giving it a dual role as a retailer and a wholesaler.

The *Co-operative Retail Society (CRS)* trades simply as Co-operative. *CRS* has about 56 stores and about 26 stores sell white goods. *Homeworld* is the name it uses for its superstores. The notable feature of *CRS* is that it purchases its white goods directly from suppliers rather than from the *CWS*.

Iceland Group plc

The main subsidiary of Iceland is Iceland Frozen Foods plc, which has about 760 outlets trading under the name of Iceland. About two thirds are high street stores. The 330 showrooms display a wide range of refrigerators, freezers and microwave ovens. *Iceland* is price competitive and offers own-label or exclusive lines to differentiate itself from its competitors. The principal own brand is *Iceline*.

Departmental stores

Departmental stores display stock of both white and brown goods. The Departmental store chains who offer goods from five or more outlets worthy of note include *Allders*, *House of Fraser* and *John Lewis Partnership plc*.

Allders Department Stores Ltd.

This is the principal subsidiary of *Allders plc.*, operating from 20 *Allders* department stores and 10 *Allders* Home shops in Greater London, central, southern and northern England. White goods are sold from all these locations, of which 8 are out of town and 2 are edge of town. *Allders* is managed centrally and includes buying and pricing.

House of Fraser

This is the principal subsidiary of *House of Fraser plc*. Trading takes place under several names, which includes *Rackhams*, *Binns*, *Army & Navy*, *Dickins & Jones* as well as its own name. Most of their stores are located in high street locations throughout Great Britain.

John Lewis Partnership plc

The principal subsidiary is John Lewis plc. It operates about 23 departmental stores in England and Wales under a variety of names. The majority of their stores sell white goods. The stores differentiate themselves from competitors by accepting the stores debit cards instead of credit cards. They also offer a free one-year extension to the supplier's warranty on appliances purchased and prefer this arrangement to promotions.

Small retailers

In this study firms with less than 5 outlets are considered as small retailers. The MMC report indicates that the total number of small retailers in the UK is expected to be greater than 3000. Small retailers appear not to compete on prices but project customer values through free delivery and installation, favourable credit terms and free warranties to counter balance price differentials.

Many small retailers are members of retail buying groups and, as members, they use the buying power of these organisations to gain access to leading brands and also for purchasing at competitive prices. However, the listing in the small retailer outlets seems to favour products from the bottom/ middle end of the market with low margins.

Retailer buying groups

The difficulties in obtaining goods from suppliers have led the way for some small retailers to form buying groups. The purpose is to exploit favourable buying terms from suppliers who preferred to sell large quantities. The total turnover was about £83 million in 1995 (MMC, 1997 pp.46)

The largest of these is the *Combined Independent Holdings (CIH)* which are owned by 21 local groups. The local groups are *CIH* shareholders and *CIH* takes title to goods purchased by their members. There are five local groups worthy of note. These are, *Birmingham Combined Independents; CITER (Wales & West); CI (CNS) covering Cambridgeshire, Norfolk and Suffolk; CI North and CIR (NI)*. Some of these local groups do take title to the goods they purchase for their members.

CIH facilitates and guarantees payments to suppliers for orders placed by individual suppliers. About 80% of *CIH* turnover consist of retailers ordering direct from suppliers using *CIH* headed paper and the supplier delivers direct to the retailer. All transactions are thus recorded in *CIH* books for monthly settlement with the supplier, whilst billing the retailer concerned for the goods he has received. *CIH* does not handle these goods physically. The remaining 20% of the turnover consist of buying goods in bulk from suppliers for resale to individual retailers. Thus *CIH* not only takes title and physical possession of this 'central stock', but also takes responsibility for distributing them to retailers and is a member of *Euronics*, a Europe wide buying group. This group can, in its own right negotiates discounts or promotional offers with the suppliers on behalf of its members. There are other retailer groups such as *Scottish Independent Television Dealers Association* with about 50 members and *Combined Independents of Ulster* who do not take title to goods purchased by its members.

Mail order companies

Shops and stores are locations where most retail trade for electrical goods takes place. However, there is a large amount of trade that is taking place where there are no retail premises. The public is contacted directly through advertisements contained in catalogues and leaflets. This type of trade is known as mail order.

The term mail order is connected to companies that send out large catalogues advertising a wide range of merchandise including electrical goods. These are known as general catalogue mail order traders, where the customers are contacted directly by them. There is also another category where trade is conducted through agents. Catalogues are sent to these agents in the first instance and the mail order company deals with the customer through its agent. This is the most popular practice.

There are typically two catalogue issues per annum with several promotional updates. These catalogues display a wide range of merchandise where prices are fixed for this term. To facilitate this price setting, suppliers also review their prices twice a year for mail order companies.

The prices charged by the mail order companies are typically between 10 to 15 per cent higher than those charged in the high street. The high costs associated with their method of operation, for example, Agents commission, free credit, delivery costs, bad debts, cost of returns, and installations, are some reasons for high prices.

The mail order companies dispatch these catalogues to their agents who in turn take orders by post or telephone. Most goods are sent on approval. The agent passes goods to the customer, but bulky items are despatched directly to the customer. The customer is given 14 days to accept or return goods before payments begin. Goods not accepted are returned via agent's arrangements.

Payment is usually made by weekly instalments to the agent. The mail order companies make no charge for granting credit, say for a 20-week term. The agent deposits cash instalments into the mail order companies bank account. For their services the agents receive a commission of 10% in cash or 12.5% discount on goods purchased.

Mail order companies provide customer help lines. The advice in most cases is on the descriptions only. Mail order companies have also stated that it is unlikely the staff offering advice have the expertise in all white goods and are not technically qualified.

Five companies dominate the mail order segment. These are:

GUS (Great Universal), Littlewoods, Empire, Freemans, and Grattan.

Other Dealers

Several other types of dealers sell white goods. These include Wholesalers, Warehouse clubs and rental companies.

Wholesalers

A wholesaler has been defined as a person, other than a manufacturer or importer, who buys white goods to hold in stock in the ordinary course of business with the intention of resale to retailers or other wholesalers of similar goods. In other words a wholesaler is considered here as a person who sells several brands. Some wholesalers, particularly in Northern Ireland, may be classed as distributors, since they have exclusive rights to certain brands in a given territory. Most suppliers supply white goods directly to their retailers, or to their final customers, with the exception of Northern Ireland where the supply is to the wholesaler. Only a few supplier's use this channel i.e. distributors to supplement their direct supply systems or to cater to small retailers whose volume does not justify direct supply. There may be more than 100 wholesalers with less than £500,000 of turnover and about 9 with turnover greater than half a million pounds.

The main wholesalers of white goods are:

Bridisco Ltd, Swift Electrical Wholesalers Ltd, Owenmore Distributors - Northern Ireland, Portway Domestic Appliances Ltd, Stearn Electric Co Ltd, Harris &

Russell Ltd, Newey & Eyre Ltd, Inman & Co (Electrical) Ltd, and V.Leonard & Co Ltd. - Northern Ireland.

Their total turnover in 1995 was about £32million (MMC, 1997 pp.46). The market is also served by builder's merchants and DIY multiples referred to as kitchen specialists who are also installers of fitted kitchens.

Warehouse clubs

These are dealers who operate clubs with members and sell only to their members. This membership also extends to retailers. Trading takes place in the cash and carry format. Warehouse clubs are classified as wholesalers for planning law purposes. Their housing structures can resemble both traditional warehouses and conventional retail outlets. They also sell to non-retailers. There are about 3 warehouse clubs of some significance in terms of their small market share in white goods.

They are:

N&P - Nurdin & Peacock Cash and Carry Ltd, Makro Self Service Wholesalers Limited. – Makro and, PriceCostco Europe (UK) Limited.

An important source of supply is that provided by diverters. These are firms or individuals that buy up batches of surplus white goods from manufacturers, importers or retailers in the UK and abroad. This channel may be the only venue for those who have been refused supply through a normal trading channel. These white goods carry the normal manufacturers guarantees.

N&P

N&P is a traditional cash and carry business of food and tobacco. In 1994 it diversified its business under the name of Trade & Business Warehouse, to sell a wider

range of goods including electrical goods. It has more than 50 outlets but only the largest outlet sells white goods. In 1995 14% of N&P shares were held by *SHV Makro* and in 1996 *N&P's parent - Nurdin Peacock plc* was acquired by *Booker plc* which does not sell white goods. The membership is open to retailers, caterers and many categories of sole traders. There are no membership fees.

Makro

Makro is a wholly owned subsidiary of a Dutch company, Holding *Maatschappij Ukadema NV*. *SHV Makro NV* holds 60% and *Metro Holdings AG of Zug* in Switzerland holds the other 40%. *SHV Makro* is owned by *SHV Holdings NV*, a privately owned company with its head office in Utrecht and is one of the largest cash and carry, wholesale groups in Europe with world wide sales.

Makro holds 35% of the share capital of *Chip Shop (Business to Business) Ltd.*, which trades as *Business to Business* and is the joint venture partner for the management of Office Equipment centres and *Sound and Vision centres* in *Makro* outlets. There are about 27 outlets of which some carry white goods intermittently and some display and sell white goods. *Makro* does not charge a membership fee and limits its membership to trade customers.

PriceCostco

In 1992 *The Price Company Inc (Price)* formed a 50:50 joint venture with the *Littlewoods Organisation plc* to develop a warehouse club business in the UK. North America was the first place where the concept of warehouse club operation was introduced and *Price* was a leading operator. Also in 1992 *Costco Wholesale Corporation (Costco)* another leading warehouse club operator, established a wholly owned UK

subsidiary. In 1993 *Price and Costco* merged to form a new company in the US. *PriceCosto Inc*, and the UH subsidiaries were then combined to form a single organisation. The US parent companies holding is 60% and the remaining holdings is shared equally by both *The Littlewoods Organisation plc* and *Carrefour SA*, the French supermarket group.

PriceCosto has major outlets in Thurrock, Watford, Glasgow, Liverpool and Manchester. Its main aim is to sell high quality nationally branded merchandise at low prices to businesses purchasing for commercial use or resale and also to individuals who are members of selected employee groups. There is a basic annual membership fee for both business membership and also individual members.

65% of *PriceCosto's* turnover is with trade customers and the remainder is with individual customers. Their main aim is to achieve high sales volumes through rapid inventory turnover, based on competitive pricing, which is 15 to 20 % below recommended retail prices.

Their product policy is to offer a limited assortment of merchandise in a wide variety of product categories, which includes white goods. However, at present the breadth of coverage (variants of the same product) is not available, as *Pricecostco* is dependent on diverters for white goods supply. This restriction on supplies thus forces *Pricecostco* to continually change the range of brands and models which, it makes available for sale to its customers. It is believed that the prices charged by the diverters to *PriceCostco* are about 5 to 10 % higher than their cost.

Rentals

The consumer rental business is a small portion of the total business in white goods. This scheme is aimed at customers having cash or credit restrictions and there are

no deposits or credit checks (usually). Most rental transactions involve televisions, and VCRs. Two companies that dominate the rental market are *Thorn and Granada*. With the entry of *Granada*, the growing volumes of white goods have been experienced by suppliers especially the *Hotpoint* brand supplied by *GDA Ltd* to *Granada*. *Thorn's* white goods are supplied by *Whirlpool* and it conducts its rental business through its *Radio Rental* subsidiary. *Thorn* launched its *Crazy George* operation where ownership of the product passes to the customer with the payment of the final instalment. One of the conditions of the rental of white goods is that they can be returned at any time. Hence the little or no residual value of white goods thus returned has forced many rental outlets to concentrate on Televisions and or VCRs as they are easy to handle and deliver, and do not require much display space.

Dealers in Northern Ireland

In Northern Ireland, a large proportion of electrical goods, which includes white goods, are distributed through wholesalers rather than retailers. The general consensus is that 75% of this market accounted for small retailers who were unable to meet the minimum turnover requirements of the suppliers for direct supplies to them. Furthermore the high freight cost and long lead times were at a disadvantage to the small retailer. The political environment was not satisfactory for some suppliers to set up local operations. However, the recent improvement in the political health has given way to a further problem i.e. the refusal of some suppliers to have their products stocked by the same wholesaler as their competitors.

CIR (NI), a local group which is a shareholder of *CIH*, has a significant presence in Northern Ireland with 14 members. It obtains white goods directly from suppliers and local wholesalers. Its operations also include warehouse facilities and a procurement

service for its members. Combined Independents of Ulster has 34 members for whom it negotiates favourable terms of supply and arranges direct delivery as it does not take title to goods.

There are also 9 branches of *Dixons* in Northern Ireland. *NIR Retail* is the largest retailer with 33 branches. *Makro* has 1 outlet in Belfast.

2.2.3 Conclusion

The year in which trading of the white goods first took place is unknown. The present market leaders are national multiples and these firms were involved in relative businesses before moving into white goods retailing. The regional electricity companies also diversified from established outlets throughout the UK, collecting electricity revenues to selling white goods from the same outlets. The firms mentioned above account for more than 50% of the market shares in this retail channel. There are a large numbers of small retailers mostly family owned with four or more outlets accounting for about 25% of trading of white goods. Hence it is possible that some of the small retailers were r-strategists at the birth of the retail channel followed by more small retailers, regional multiples, mail order companies and departmental stores. The k-generalists came later into the retail channel in the form of national multiples and regional electricity companies. Table 2.2 below depicts the age profile of firms in this retail channel and it is interesting to note that both current market leaders are national multiples (*Dixons and Comet*) and have been trading in white goods for about 14 years.

Table 2.2 Age Profile

No Of Years (trading)	No of Firms (in survey)
<10	17
10<20	16
20<30	12
30<40	10
40<50	8
50<60	2
60<70	2
70<80	1
80<90	0
90<100	1
>100	0

Source: Compiled by author

2.2.4 White Goods Industry

In order to understand when a resource becomes valuable it is necessary to find out the conditions under which it becomes valuable. White goods are sold to consumers in a traditional way i.e. through retailers in the UK and are an important consideration. Markets can be volatile, dynamic or moderately dynamic. The causes for such states are driven by technology that can make a stable environment become unstable overnight. Volatility in this industry is based on how the product behaves i.e. whether technology can change it swiftly.

In high velocity markets, changes become non-linear and less predictable. The overall industry structure is unclear, market boundaries are blurred and market players are ambiguous and shifting. Furthermore the predictability plus the reliability of successful business models become redundant (Eisenhardt and Martin, 2000).

On the other hand in moderately dynamic markets, change occurs frequently along roughly predictable linear paths. The industry structures are stable, market boundaries are clear and the players are well known. In these markets management capabilities rely on

existing capabilities (Eisenhardt and Martin, 2000). Therefore, the process below is a means of examining market dynamism in order to extract the factors that drive the value of key resource(s).

The white goods industry in the UK is a mature industry, which supplies domestic appliances to the retail channel for white goods. White goods are in the mature stage of their life cycle and continual improvements are made only on quality and appearance. The structure of the suppliers mirrors the retailer's i.e. few retailers/suppliers hold major market shares. There is excess capacity in the white goods industry and this is believed to be a deterrent for new entrants into this industry. The retail channel for domestic electrical goods in the UK is the customer of the white goods industry and is also the main suppliers of electrical goods to the domestic appliance market.

White goods are well-established consumer durable and the products are in a mature stage experiencing static annual consumer demand. Products undergo incremental improvements in quality and appearance and very little changes have taken place in the last 10 years. Suppliers have also commented that they did not envisage major technical innovations in the foreseeable future (MMC 1997, Vol.11, Chapter7).

Most white goods retailers acquire appliances directly from the suppliers, whilst only limited volumes are purchased from wholesalers or distributors. Some small retailers of white goods have formed buying groups to take advantage of buying power. Electrical goods are classified into two categories i.e. white goods and brown goods. White goods sales are seasonal, for example, more tumble dryers are demanded during winter months and cold food storage equipment in the summer months.

2.2.5 Market size

White goods are a product line within the total domestic appliances market (Housing Market). Key Note Ltd in 1997 surveyed white goods as the largest product line accounting for more than 79.5 % of the total domestic appliance market by value (Table 2.3). The domestic appliance market includes white goods, vacuum cleaners, installable heating, space heating, water heating and electric blankets. White Goods are household appliances, which include washing machines, tumble dryers, spin dryers, washer dryers, refrigerators, fridge freezers, deep freezers, gas cookers, electric cookers, microwave ovens and dishwashers.

Table 2.3 Domestic Appliance Market

Product groups	Value £000's
White goods	2223
Vacuum cleaners	301
Installed heating	86
Space heating	61
Water heating	96
Electric blankets	30
Total	2797

Source: Key Note Ltd. (1997)

2.2.6 Market segmentation

Segmentation of the white goods market is by product - home laundry products, refrigerators and fridge freezers, cookers and dishwashers. Table 2.4 displays the volumes of 3 categories of white goods. The white goods technology is mature and changes are

relatively slow. Brand names are of importance in this industry as it signals quality and reliability to the consumer. The quality and reliability of the above products vary and the ranges are categorised as low, medium and high. The margins for products in the bottom end of the market (low range) are low, and the products in the middle, and upper end of the market enjoy relatively high margins. There is also a high degree of product differentiation and as already mentioned the sale of white goods is seasonal.

Table 2.4 Segmentation of Products

Products	Volume Units 000's	%
Washing machines	1754.1	33.18
Tumble Dryers	555.7	10.51
Cold food storage products	2556.7	48.37
Dishwashers	419.4	7.93
Total	5285.9	100.00

Source: MMC (1997)

Home Laundry Products

Home laundry products include washing machines, tumble dryers and washer dryers accounting for about 31% of the total white goods market. Washing machines make up the largest sector within the white goods market, accounting for about 23% of sales by value. In the recent past washer dryer growth has been less encouraging due to their poor performance in the drying area compared to tumble dryers. Customers have found it cumbersome to unload the wash-load before drying could begin. The washer dryer cannot dry a full wash-load and drying recommendations are for two drying loads.

Refrigerators and Fridge Freezers

The market for refrigerators and fridge freezers are more dependent on the weather than on economics. Hot summers seem to encourage buying. Concern for food safety and refrigerator temperatures, along with energy labelling, has encouraged manufacturers to produce high performance machines for example, frost free, ozone friendly machines and lower energy consumption levels at higher prices.

Dishwashers

The market for dishwashers has not grown as fast as anticipated. The reduction in prices has helped with slower growth. Consumers still perceive a dishwasher as a luxury. Manufacturers are countering this claim by encouraging first time buyers to own a dishwasher at a lower price. Builders on the other hand are closing house deals with the offer of a free dishwasher.

2.2.7 Major suppliers

Mainly large company groups supply the UK white goods market. A small number of specialised manufacturers are also involved in the supply activity. There is concentration in the industry and the details are shown in Table 2.5 below. The details of the firms and firm activities are not considered in this study.

Table 2.5 UK Market Shares of Supplier Brands

Suppliers	Washing Machines	Tumble Dryers	Dishwashers	Cold Food Storage
	%	%	%	%
GDA	31.8	44.1	21.6	22.1
Emaco	20.7	16.2	27.6	21.4
MDA	12.1		7.7	2.6
Candy/CDA	13.5		5.1	6.2
Crosslee		22.7		
BSDA			20.6	5.1
Lec				10.9
Other	21.9	17.0	17.4	31.7
Total	100.0	100.0	100.0	100.0

Source: MMC (1997)

2.2.8 Conclusion

The white goods industry is highly concentrated as the supplies of goods are in the hands of few suppliers. Likewise it has been demonstrated that the retail channel is also highly concentrated, depicting that major trading takes place between strategic groups. The competitive strategies deployed by these groups may vary depending on their individual endowments of resources and capabilities. Brand names are of importance in this industry as they signal quality and reliability to the consumer. In the UK major brands are well established and the loyalty attached makes it very difficult for new entrant to this market. There is also a high degree of product differentiation and the sale of white goods is seasonal, products at the upper/middle end of the market command higher margins.

Retailer organisations are the most important intermediary in the UK for the display and sale of white goods. Numerous outlets scattered throughout the UK facilitate the display and selling process. For outlets to be valuable in this retail channel superior firms must have the capacity to display and deliver customer needs. Effective and

efficient capacity utilisation of outlets equates to holding product portfolios that maximise returns and/or increase market shares for its shareholders.

2.3 The structure or rules which govern the behaviour of the participants

2.3.1 Economic Factors

The housing market dictates the growth or decline of the domestic appliance market. In the UK house moves are the key factor in the purchase of household appliances. Households are purchased using mortgage facilities supplied by the financial institutions in the UK. The cost of borrowing money (mortgage rate) plays a significant part in the decision making process where house purchases are concerned. High mortgage rates can depress the housing market and a lower rate can stimulate movement between houses. However the lower mortgage rates do not always stimulate movement because consumers need to have confidence in the economic policies of the ruling government at the time the decision is to be taken. People are aware of the pitfalls of the short-term measures taken by various governments and are now very cautious with their long-term commitments.

The lack of consumer confidence means that long-term investments can be postponed to a future date. The effect on the appliance markets has been to trade down in terms of price, reducing the average price of appliances. Some consumers on the other hand have been lengthening the replacement cycles for existing appliances with replacements taking place between 4 to 5 years on average. This was possible because, with lower levels of product innovation in white goods compared to that of audio-visual products, it was easier for consumers to put off purchases. However this situation has created pent -up demand and its release in the future may result in consumers replacing their existing appliances and some trading up to better, more expensive, specified

products. Rental companies have also joined in by offering ownership through high purchase schemes. There appears to be potential for further growth as consumers have the opportunity to change appliances as and when in exchange for new models.

2.3.2 Environmental Analysis

The Housing market

After the boom in the 1980's the housing industry in the UK has undergone considerable changes mainly due to house prices falling resulting in negative equity for many householders. Consumer confidence was dented and spending on new appliances slowed down dramatically. However, The National Council of Building Materials Producers (BMP) - Statistical Bulletin, - Dec 1996 reported that there has been an overall increase of 6.06% in new housing starts since 1991 (163400 units), despite the recovery faltering between 1994 (200000 Units), and 1995 (167300 units), when it fell back by 16.06%. In 1996 the new housing starts increased to (174200 units) with a growth of 4.1% over 1995, figures indicating the slump had slowed down and the future prospects were good. The steady increase in house prices since 1996 has boosted consumer confidence in relation to spending on new appliances enhanced by more choices in appliance selection in the market place and vigorous competition between suppliers. The sale of council owned properties has also played a significant role in the housing market.

Household Size

One of the key factors affecting many consumer markets is the increase in the number of households in the UK, creating a potentially larger and diverse market for companies to target. The new housing stock is on average smaller than those built in previous years. The Office for National Statistics/Key Note has reported that the number

of households in the UK has risen by 7.5% between 1991 and 1996, bringing the housing stock to 24.1 million units in 1996. *Key Note Ltd* in 1997 predicted further steady increases in the future.

The increase in housing stock was partly due to the rising population and partly due to the increased divorce rates in the UK. Divorces have created a situation where the number of people living alone by choice has increased resulting in the strong growth in single person households.

Furthermore a key demographic trend during the last decade has been the increase in the proportions of women in full time and part time employment. The traditional family role of the women has changed bringing in time constraints for normal household chores and offsetting this discomfort through increased household income. This in turn has boosted the demand for labour saving appliances such as a washing machine, which is easy to use, reliable and cost effective. The increasingly busy life of men and women caused through different working shifts has had an effect on eating habits too. The availability of convenience foods has supported irregular meal times, creating demand for products such as microwave ovens, fridge freezers and dishwashers.

The extra households therefore have created considerable potential for exploitation, as there may be demand for more and more white goods. However, there are constraints as well. These constraints may be on space for appliances. The demand therefore, could be for slimline appliances. Most extra households are single person households with *Key Note* reporting 7 million households in 1996 - an increase of 27.5% since 1990.

2.3.3 Trade Associations

The Radio, Electrical and Television Retailers' Association (RETRA) is the dominant organisation with about 1400 members in England, Scotland, and Wales. The

membership consists of small retailers -independent businesses and two large member organisations in *Thorn and Granada* and a retailer-buying group. *RETRA* is primarily a brown goods association with a growing white goods arm. Membership of *RETRA* was conditional on agreeing to abide by a long standing code of practice, developed in conjunction with the *Offices of Fair Trading -OFT* on the sales and after sales service of the products that *RETRA* members sold and rented. *RETRA* itself has no involvement in buying but is a self-regulating body.

RETRA acts as a lobbying group representing the interests of its members both large and small players with the British Government and also the European Commission. The services it provides which are worthy of note to its members are: clearing house schemes, a range of standard forms complying with legal requirements on hire purchase and rental agreements, special terms with credit card processors. *RETRA* also provides the secretariat for the retailers forum, a less formal organisation which brings together the big players such as *Dixons*, *REC's* and the small players too, to discuss matters of mutual interest of all electrical businesses. Some large retailers i.e. *Dixons* are members of *the British Retail Consortium - (BRC)*, whilst agency mail order companies are members of the mail order traders associations.

2.4 The options available in terms of competitor behaviour

2.4.1 Introduction

The aim of this study is to test competitive advantages in a specific retail channel by explaining that firm heterogeneity is caused by firm activities, which lead to firm efficiencies/effectiveness. In order to achieve this objective it is necessary to choose factors (variables) relevant to the problem in hand. The factors in question here are resources and capabilities of the retail channel for white goods. The identification and the

screening of key resources and capabilities take into consideration the key resources and capabilities that drive other resource bases in pursuit of firm objectives. Managerial manipulation ensures firm efficiency and effectiveness and is path lead. The resources that need manipulating in the retail channel for white goods are primarily connected to product portfolios that maximise returns and/or increases market shares for its shareholders. The key point for managerial decision making here is that of economic rationality. Rationality implies a link between actions and intentions, but not common intentions between competitors and includes profit from each competitive action, the time pattern of actions and the nature of information about competitive activity. However, it was noted earlier that human behaviour stretches beyond economic rationality to social justifications and obligations and the management of normative rationality is an important source of competitive advantage.

The information depicted in the following paragraphs are for identifying and screening independent key factors and their measures, which will result in the best explanations for firm heterogeneity in the retail channel. Furthermore it is also a process that helps decide how the response variable can be measured accurately for the testing of competitive advantages in the retail channel for white goods.

2.4.2 Services Offered by retailers

2.4.2.1 Store Locations - Outlets

One of the most important changes in electrical goods retailing has been the move from high street locations to out of town locations. The increase in size has thus requires the renaming of stores to superstores. With so many models and variants available today, it is not surprising that such a move has happened. Displaying models to the public is an important feature of retailing and is a competitive advantage. The most successful

retailers have spent heavily on improving their existing outlets and have also relocated to better sites.

The traditional performance measures were the sales per square foot of space. With the move to larger outlets this measure has been switched to sales per store. This is to accommodate far higher sales of bulky, high-ticket items, which would not be possible otherwise. The idea was to increase the turnover values per store but instead has resulted in lower sales per square foot. The compensating fact of higher margins on the more expensive products gave the out of town stores a better margin performance per outlet. Some stores have suffered from increased out of town competition, whereas turnover for those with a mixed portfolio of high street, shopping centre and out of town shops have not been adversely affected by the growth of out of town outlets.

The 1996 *Verdict* report showed that the number of electrical superstores grew from 200 in 1986 to 743 in 1996. Of these 670 were operated by 8 of the largest retailers, indicating that smaller dealers have not been able to move out of town. The larger retailers therefore appear to have a competitive advantage selling bulky white goods. Furthermore, the withdrawal of many *REC's* has resulted in closures of about 700 of their high street stores. Other retailers had acquired some of these stores. The larger retailers have also reviewed their position on high street stores and this has resulted in closure of some of their bad performers. Whether this move has increased or decreased the overall space available for white goods is unknown. Competition for space between white goods and other electrical goods may also be a factor based on shop margins or sales per square foot. Therefore, if the total area had increased now compared to previous years and the units demanded remained fairly constant, then market growth can only be at the expense of competition.

2.4.2.2 Stocking policy

White goods have in general a life span of several years. Modifications come through cosmetic changes every one or two years and have very little technical changes. Suppliers usually inform retailers of new model details between 2 to 6 months before the launch date. The product reviews are held outside the UK and one of the famous exhibition venues is in Germany. Both the larger and smaller retailers attend this exhibition not only to find out what is offered in the European market but also to have discussions on the intended positioning - (price) of these products in the UK market.

Product selection is one of the principal means by which retailers can differentiate themselves from their competitors. This is possible because there are several manufacturers of white goods, who have one or more brands in production. These manufacturers build a large number of models and model variants offering choices from low, medium, high-quality/price to serve the mass markets. It is this choice of products which enables retailers to stock a range that is different from their competitors.

Larger retailers have the storage capacity to choose a range of models with a good spread to meet both the price and quality demands of their customers. Most models are chosen from what is available on the basis of their perceived marketability. Medium sized retailers favour major brand names and appear to go for brand leaders basing their stock selection on quality.

Some suppliers regarded the small retailers as an important distribution channel for their brands. MMC investigations also indicate that some brands that are widely stocked by some small retailers achieved relatively low market shares compared to those retailers who infrequently stocked but achieved higher market shares. For example *Creda* washing machines were listed by 41% of the small retailers surveyed yet had only 2.6% of the market shares when compared to *AEG* listed by only 17% of respondents achieved

a share of 2.8%. *GDA Ltd.* uses about 1000 small retailers who guarantee about 60,000 unit sales per annum of medium to low quality products.

The stocking policy of the mail order companies is based on exclusivity. The catalogues may not display all the models that are available for the brands selected. Only a small proportion of models is listed and restricted to maybe one brand.

2.4.2.3 Own Label brands and exclusive models

Own label brands are products offered under a brand name, which is owned or has been licensed usually by a large retailer. These products are built to the brand owner's specification or they may be a supplier's products, which are labelled with the name of one of the retailer brands for example, the *Electra* brand. MMC data that depicts about 16-17% of the total sales of white goods are from selective distribution deals.

Retailers can obtain branded products from some suppliers on an exclusive basis. Exclusivity may be available in return for a large order through both domestic and overseas manufacturers. There are also situations where a manufacturer may have over-produced and is prepared to sell to the retailers the remaining stock at favourable prices exclusively in order to improve their cash flows. Some suppliers may also import excessive quantities, which may end up as surplus to market requirements and they may be forced to adopt the same tactics. This process is not exclusive, as similar products would have been sold to other retailers.

In some cases exclusivity can arise through retailers displaying a distinct model number for a product. Certain features may be added or taken away in this situation or there may be some cosmetic difference to the product specification. It is also possible to find products with only a different label.

The main feature in the stocking policy of own label and exclusive models is that of price flexibility. The gross margin on these products is usually lower than that of branded products and the retailers may use this flexibility to increase their turnover whenever it suits them.

2.4.2.4 Differentiation of product offerings

There is a wide variety of products with a range of quality options. In 1995 the biggest retailer *Dixons* listed for example 110 washing machine variants from different brand names. With the inclusion of own brand labels there could be at least 13 brands in the market fighting each other for market share. Other retailers may list according to the number of outlets available to them and may or may not prefer leading brands. For business reasons it is unlikely that the biggest retailer would stock or even list all the brands that are available. According to major retailers, listings are based on the perceived marketability of the products. However, the most appropriate form of competitive strategy will depend on the type of products the retailer is offering. A survey carried out by *Comet* on buyer behaviour has revealed that about 30% of consumers only visited the outlet they made the purchase from and between 55-64% either bought at their normal shop without shopping around or had visited only one or two other shops before arriving at their purchasing decision.

Retailers may, therefore hold/list product portfolios sufficient to gather the expected returns and/or market shares on a national basis, based on available outlets. Some retailers may decide to follow the leader in strategy selection and others may have a focus strategy - concentrating on one or more particular segments or niches of the market, whilst, not trying to serve the entire market with a single product or brand.

The MMC survey in 1995 on the six best selling models based on retailer sales turnover depicted even sales and could not identify a single model that was a best seller. This indicates the competitive strategy followed in this retail channel is mainly the product differentiation strategy and that there could be close substitutes. This is because there were marked differences in the models and variants chosen, confirming retailers distinctive ranges and prices.

2.4.2.5 Pricing

The major retailers hold discussions and negotiations with the main suppliers on an annual basis to determine the level of net buying prices with a view to agreeing trade prices. These trade prices are based on retailer perception of the market for the year ahead. Catalogue sales are, however, set twice a year. The retailers also agree terms and conditions with suppliers regarding discounts, margin maintenance support and other incentives based on sales targets. Negotiations and discussions by both large suppliers and retailers take place at a very senior level. With small retailers the above take place with suppliers area representatives.

The main policy of the retail channel is to price their product competitively, to match competitors prices or to price products lower than their competitors. Small retailers are generally not involved in price matching/or cutting but use other incentives instead for example, free deliveries, free warranties etc, and only larger retailers are involved in price cutting or price matching at present. Price competition between retailers is affected by the availability of particular brands or models in the various outlets. For this reason it is suggested that retailers often select different models from those chosen by their competitors in order to make price comparisons difficult for customers. This process avoids head to head confrontation with other competitors (MMC 1997, Vol1, pp. 88) and

protects product margins. The *'Which'* magazine survey of standards of service in electrical goods in 1996 also found that, despite widely publicised claims of price cuts and special deals, the larger chains not only matched each other on price, but were the most expensive. The independents and smaller chains tended to be cheaper.

2.4.2.6 In store service and staff training

Another feature of white goods retailing is that it is generally not practicable to demonstrate most of the features of the appliances. The absence of practical demonstrations however has not deterred customers from purchasing for example, a washing machine, as they were already familiar with its basic features. However, the accelerating technology of some of the products has shown growing importance to customer service.

Suppliers as well as retailers recognise the importance of in-store service, which has to be provided by suitably trained staff. Although the quality of service in stores has improved considerably over the years it is still a problem. Retailers can provide high quality general sales training, but high quality product training is necessary to sell highly priced brands. For cost reasons, retailers are finding it difficult to employ suitably qualified staff with technical background. However, many suppliers are now expending their useful resources through retailer staff training programmes to address this problem. *'Which'* magazine conducted a survey in 1996 into the standards of service in electrical goods and found only 15% of sales assistants were deemed to be excellent in customer services, whilst 53% were found to be poor.

2.4.2.7 Consumer credit

White goods are expensive items and not all consumers readily pay cash for purchases made at outlets. On average these purchases happen once in four or five years and are never planned. In order to facilitate instant purchasing and payment by instalment, several multiple retailers issue their own store cards, which offer an interest bearing account facility. Most retailers also accept third party debit/credit cards. With all cards the consumer can settle the account within one month of purchase or pay the balance by instalments incurring interest.

Most retailers arrange their consumer credit and promotional credit through an outside finance house, which takes over the responsibility for approving credit and collecting instalments. The retailer, on the other hand, receives commission for the business transacted. Two finance houses worthy of note for white goods businesses are *Lombard Tricity Finance* and *Time Retail Finance Ltd* (Wholly owned subsidiary of *Kingfisher*). There are some retailers who finance credit transactions themselves, taking on the expense of administration and the risk of bad debts. For this facility they earn additional interest income.

Most *RECs* and mail order companies finance their own credit facilities, whilst the provision of credit is the key strategy of a few smaller multiples. With credit facilities the debtors in a balance sheet would be high, thus reflecting extended credit terms. These companies therefore need to have strong balance sheets to survive.

2.4.2.8 Promotional credit

This is when credit offered is either interest free or a deferred payment - 'buy now pay later'. With interest free credit, the purchaser usually pays a deposit and pays the balance on the purchase price in equal monthly instalments. The 'buy now pay later'

scheme operates on a deposit payment now and several months grace before the balance on the purchase price is paid. There are also situations where a 'buy now pay later' customer can opt for further periods of interest bearing credit, earning commission for the retailer from a finance company.

Retailers through finance companies or their own finance credit facility arrange the cost of funding promotional credit. The type of consumer who uses these credit facilities are normally well off customers, who really do not need credit and are creditworthy. This scheme simply enables them to gain extended payment terms. On the other hand, if customers were influenced by weekly or monthly payment terms, then they would seek mail order companies for their transactions. The strategy used by retailers offering promotional credit is also to weaken the competitive advantage of mail order companies. The growth of interest free credit has led to increased competition, which has resulted in the erosion of the mail order companies volume of business.

Promotional credit is normally borne by manufacturers or suppliers on the certain lines they wish to promote. It takes the form of subsidised sales. The retailer however would subsidise other lines not subsidised by suppliers. It is believed that the actual cost of subsidy to the retailer is small as most of the subsidy comes from the supplier. To the consumer the benefit is the high interest charges avoided on credit cards.

2.4.2.9 Delivery and installation of goods

Many large retailers make a charge for the above service. Due to the increasing duty levied on fuel prices some retailers do not always cover the cost of delivery and therefore charging for delivery of white goods to the customer homes is essential. On top of this delivery charge the retailers also offer choices for in-house installation of appliances. There is a charge for connection of an appliance to an existing supply.

Dixons, the biggest retailer, uses its subsidiary, *Mastercare* to carry out this work. *Comet*, on the other hand, sub contracts this part of the work.

Smaller multiple retailers and some *RECs* offer free delivery and installation as part of service led position in the market. Again due to escalating transport costs some or even all have begun charging for these services. At present only small retailers offer free delivery, which is their strategy to counter price-cutting. Mail order companies, however, arrange delivery to their customers homes directly from their suppliers, whilst some have their own delivery fleet.

Recently, some suppliers have reported an increased level of demand for their direct delivery service. This is not very surprising. The advantage to the retailer comes from reduced level of stocks, with its associated storage and financing costs and the risk of obsolescence. The other additional benefits to the customer are the removal of old appliances and packaging which may or may not incur a charge, 24 hour delivery service and am/pm deliveries, plus a telephone service for confirmation of delivery dates.

2.4.2.10 Non price promotions

A wide range of promotional devices is used to stimulate interest and encourage sales from different type of customers. The diversity of offerings triggers different appeals, which may be partly or wholly funded by suppliers. These offers are aimed to inject value for money into customer minds. Offerings include trade-ins, free gifts, free accessories, competitions and package deals. However, some suppliers have been reluctant to offer non-price promotions due to their logistical complexities.

2.4.2.11 After sales service

Suppliers usually arrange servicing for white goods and some use their own facilities throughout the UK. Those who do not have these facilities sub contract the work to nominated service organisations. Retailers do not take responsibility for repair work but they may in certain circumstances take responsibility for the after care servicing of their own label white goods. After sales service could be an important feature for customers purchasing white goods.

2.4.2.12 Extended warranties

A manufacturer under normal trading situations provides the customer with a warranty for the goods purchased from a retailer. The period covered by the warranty is usually one year for parts and labour. However, most retailers sell extended warranties for all white goods which come into effect when the manufacturers warranty expires. This provision is normally an extension for a further four years. Retailers will source their extended warranties from a single insurer, who undertakes the administration of the policy and the handling of claims. In some cases the customer is able to buy off the shelf policies from both large and small retailers.

Some policies are not insured and some large retailers take a substantial part of the risk themselves, by having the insurer reinsure part of the risk with another insurance company. A few retailers are known to tempt customers with free extended warranties, which is an alternative to price-cutting.

2.4.2.13 Advertising by Retailers

Advertising spend is an important feature of trading for both the supplier and the retailer. A supplier will target advertising to strengthen the brand, whereas the retailers advertise a variety of products. Only large retailers advertise nationally and the small retailers advertise locally.

2.4.3 Conclusion

Some important information has emerged from the review of the industry chapter. The review indicates that the market is moderately dynamic as changes occur frequently but only in terms of quality variations. This means it is relatively predictable as it follows a linear path. The retail channel for white goods has relatively stable structures with a handful of firms dominating the retail channel and it is almost a mirror image of its suppliers. There is a portfolio of white goods made available from a portfolio of high street, shopping centre and out of town retailer outlets. Some retailers have moved to larger outlets to accommodate far higher sales of bulky, high-ticket items. The compensating fact is higher margins on the more expensive products gave the out of town stores a better margin performance per outlet. The traditional performance measures of sales per square foot of space has been replaced by sales per outlet and this change depicts that the listing of products in outlets will depend on product portfolios that maximise returns and/or increase market shares for their shareholders.

The market leaders i.e. *Dixons* and *Comet* both switched into the white goods business about the same time (early 1980s) and appear to have resources and experiences gathered from the businesses at birth. Growth has been through organic processes as well as acquisition and mergers. *Dixons* main competitive strategy appears to be that of differentiation whereas *Comet* initially based their strategies on cost cutting before

switching to differentiation. White goods are well-established consumer durable products, which are highly differentiated due to quality variations. The white goods industry has reached its mature stages and any major innovations are not expected in the next few years.

The key resource appears to be the outlets. Organisational skills are needed to ensure the availability of leading brands of high medium, and low ranges of white goods at these outlets. Inter-firm relationships i.e. exclusive deals and inventory management facilitates economic exchange and is important for this retail channel. Information on bulk buying and warehousing is limited. Activities relating both product/non-product activities rely on marketing strategies that are fairly predictable for example, promotion schemes, free warranties, free gifts, consumer credit, free deliveries etc. and may be exploitable in the short term and quickly analysed and imitated on the long term.

To summarise, the value of key resource(s) can only be enhanced and sustained by delivering customer values from product portfolios that maximise returns and/or increase market shares for its shareholders.

Chapter 3

Literature Review

3.1 Introduction

Resources and capabilities are foundation stones upon which a firm's long term strategy is built, and provides both the basic direction and a primary source of profit for the firm (Grant, 1991). A resource based view of a firm claims competitive advantage as an offshoot of the reaction caused by a team of deployed resources that produce unique capabilities of corporation and co-ordination within such teams (Grant, 1991).

Given the positive impact the diffusion of RBV has had on the field of strategy and cognate business activities, it was appropriate to look beyond a singular view using multiple theoretical approaches to extract the richer descriptions of organisational actions, their antecedents, and their consequences (Gray and Wood, 1991). Encouraged by this thought I have set about to test competitive advantage in a specific retail channel that links RBV to retailing for explanations for firm heterogeneity in terms of firm efficiencies and effectiveness. To this extent this chapter reviews the literature on competitive advantage from the perspectives of RBV and retailing.

The hypotheses for this study are based on Penrose's (1959) observation that a firm may achieve above-normal rents not because it has better resources, but rather the firm's distinctive competence involves making better use of its resources. The hypothesis also took into consideration the sources of competitive advantages in terms of retailer differentiation of scale/scope and services respectively. To this extent retailer differentiation of scale/scope was represented by key resources and retailer differentiation

of services included organisational, inter organisational, competitive behaviour and strategic adaptive capabilities.

The testing of the association of competitive advantage with resources and capabilities are based on the following premise. A firm is said to have competitive advantage when it is implementing a value creating strategy not simultaneously implemented by current or potential competitors (Barney, 1991). Firms become efficient and effective from firm activities driven by key resource(s) and facilitated by organisational capabilities that manipulate firm resource bases ensuring the potential for the key resource is fulfilled over time. The effective utilisation of the key resource is nevertheless dependent on how it reacts with the market factors within the market structure in question that either creates or impede demand for the retailers.

In the retail channel for white goods, the main value creating strategy is the delivery of customer values that maximise returns and/or increase market shares for the shareholders. Market shares are used as a proxy for competitive advantages in this study. Value maximisation of key resources is internal to the firm and increases over time, subsequently making those resources valuable, rare, inimitable, non-substitutable, non-transferable, and highly marketable.

3.2 Sources of Competitive advantage

Barney (1991) provides the most detailed and formalised representation of the business level resource based perspective (Priem and Butler, 2001). In his article a firm is said to have a competitive advantage when it is implementing a value creating strategy not simultaneously implemented by current or potential competitors. He further defines a sustainable advantage, as the benefits of that value creating strategy that other firms cannot duplicate. Barney (1991,1992) asserts that if a resource is valuable and rare and

imperfectly inimitable, then it can be a source of competitive advantage. Value is created as goods move along the vertical chain and this is referred to as the value chain (Porter, 1985). The search for competitive advantage involves scrutinising the value chain and identifying the key resources that drive capabilities within and outside the firm that create more value when compared to those of the competitors.

Besanko *et al.* (2000) explain the resource-based theory of a firm as a framework used in strategy based on resource heterogeneity. They posit that for competitive advantage to be sustainable, it must be underpinned by resource capabilities that are scarce and imperfectly mobile, which means that well-functioning markets for resources and capabilities do not or cannot exist.

Heterogeneity across firms can only materialise if there are factor market imperfections under the resource-based view. These imperfections take the form of barriers to acquisition, imitation, and substitutability of key resources (Barney, 1986, 1991, 1994; Penrose, 1959; Amit and Shoemaker, 1993). The function of these barriers is to restrict and/or inhibit the ability of firms to purchase or duplicate critical resources, which contribute to sustainable rent advantages over a period of time. However, the resource selection and deployment tend also to create resource mobility problems, as strategic factor markets can be imperfect or incomplete. This creates barriers to resource mobility depicting unequal distribution of resources within the industry (Barney, 1986; Dierickx and Cool, 1989).

Neo-classical microeconomics focuses on how market forces determine the quantity, quality, and price of goods and services sold in a market. In equilibrium, industry demand and supply conditions determine the minimum efficiency levels required for firms to break even. The Ricardian rent theory depicts that firms will enter the industry and the output of firms in that industry will increase, so long as prices exceed

marginal costs. In the long run, some firms will become more economical in their consumption of productive factors creating efficiencies that result in lower marginal costs. These firms then reap the benefits of supernormal profits. Moreover, the perfect competition theory assumes that the factors of production are elastic in supply. In reality, some factors of production may be inelastic in supply as the time factor involved in developing capabilities may be unknown. Furthermore some capabilities cannot be bought and sold thus making some factors of production inelastic in supply (Dierickx & Cool, 1989; Barney 1991). Supply in-elasticity can thus become a source of sustained competitive advantage (Peteraf, 1993).

In the retail world the Chicago approach considers the retailing function to be essentially perfectly competitive. However, Dobson & Waterson (1999) contend that perfect competition is not evident in most areas of retailing with retailer power in a limited form being the likely norm. They argue that retailer heterogeneity is created from barriers to entry, economies of size and scope, national and local market powers, exclusivity arrangements and retailer differentiation. They have also demonstrated that retailer firm concentration in most sectors has increased substantially throughout the 1980s and that the movement of gross margins followed the direction of the concentration levels. The cause of concentration is characterised by strong economies of scale, which depicts a market structure that is imperfectly competitive. However, a model perfect competition predicts a market structure with the following characteristics:

1. Many small sellers of a homogenous product.
2. Many small buyers.
3. Free entry and exit.
4. Free mobility of economic resources.
5. Perfect information.

6. The firm is a price taker and quantity adjuster.

The use of the perfectly competitive model has increased in recent time as it is an ideal yardstick for comparison and evaluation against all other models that relate to the types of competition in the market place (Sio, 1991).

Miller *et al.* (1999) suggests that the patterns of competition among different types of retailers are complex. Their findings indicate a relationship between competition and retail structure for different types of retailers. This implies a mutually beneficial relationship among different types of retailers instead of overwhelming competitive advantages for larger stores. Their study also suggested that regardless of whether scale or saturation is examined, the size of the competitive effects is greater when store types are adjacent in the degree of end use consistency of product line, unidirectional from the lowest to the highest consistency.

Winter (1993) proposes a customer heterogeneity theory in which retailers compete on price and service, which reduce the time it takes to purchase a good. The mix of these instruments that maximises the profits of retailers is based on tastes of consumers on product margins and also the interretailer margins. Retailers create markets both locally and/or nationally, and markets with the greatest dispersion of incomes are assumed to have the greatest variation in opportunity cost of time (Winter, 1993). In the multipurpose shopping theory Ghosh (1986) states that the agglomeration of dissimilar types of retailers results in more than double the profits of stores in independent locations.

Evolutionary ecology is another means of describing the competitive processes (Henderson, 1983) and is useful for understanding the types of competitive strategies and the types of firms in an environment. Organisational theorists and sociologists have formulated a model describing the growth of a specie in an ecology, to describe the types of firms in an environment. The population of a specie is small, the effects of the carrying

capacity are small and the growth is an exponential function of the natural growth rate. This theory denotes competitive advantages emerging as a result of first mover advantages initially followed by the entry of other firms into this resource space for exploitation of efficiencies gathered from related areas. Hence, firm heterogeneity is a function of history or initial firm endowments.

The most influential work in evolutionary economics was produced by Nelson and Winter (1982). They examined the implications of the processes of variation, selection and retention. In their framework the unit of analysis was routines and the most efficient and effective routines generate competitive advantages for firms.

Under the Institutional theory it is stated that managers make value maximising decisions based on choices available to them. However these choices can be constrained by surrounding institutional factors which affect the potential for economic rents (Oliver, 1997). The institutional context refers to rules, norms, and beliefs surrounding economic activity that either define or enforce socially acceptable economic behaviour. The decisions made through economic rationality at industry, inter-firm, individual levels must then be balanced with the ability to manage the institutional context if a firm is to sustain competitive advantage (Oliver, 1997). Therefore, the institutional determinants of sustainable competitive advantage are normative rationality, institutional factors, and isomorphism.

Marketing theories along with RBV theorists directly address the most fundamental challenge of organisational survival by what gives rise to competitive advantage and how it can be sustained (Srivastava *et al.*, 2001). The role of marketing is value creation and is by definition externally focused. It attempts to determine what value is perceived, experienced and understood by customers by determining what customer needs are and it is *ex ante*. Furthermore marketing generates multiple forms of

resources through customer perceptions. Although brand names, customer and distribution relationships are helpful in gaining and sustaining competitive advantages, leading marketing theorists have not fully articulated processes by which internal and market based resources are converted into competitive advantages (Srivastava *et al.*, 2001).

The entrepreneurship theory bases its unit of analysis on the cognitive ability of individual entrepreneurs. Entrepreneurs have individual-specific resources that recognise new opportunities and the assembling of resources is also individualistic (Alvarez and Busenitz, 2001). Accordingly they argue that the entrepreneurship theory focuses on heterogeneity of beliefs about the value of resources that ultimately leads to superior performances i.e. competitive advantages between firms. They recognise that beliefs about the value of resources are themselves resources.

Therefore the predominant feature of RBV is that it explains how competitive advantage can be sustained whilst other theories mentioned above do not necessarily explain sustainability of competitive advantages.

3.3 Resources and Competitive advantage

Firm resources are defined as stocks of available factors owned or controlled by the firm. Resources are converted into final products or services using a wide range of other firm assets and bonding mechanisms (Amit and Schoemaker, 1993). The resource-based theory by Grant, (1991) identifies the key distinctions between resources and capabilities. Resources being inputs of the production process and a capability as the capacity for a team of resources to perform some tasks. Only few resources are productive on their own. Productive activity requires the co-operation and co-ordination of teams of resources. Resources are therefore a firms basic unit of analysis.

For performance to be better, the firm has to possess resources and capabilities that its competitors lack. Identification of such resources is important. Barney (1991,1992) asserts that if a resource is valuable and rare and imperfectly inimitable, then it can be a source of competitive advantage. This means a resource to be a source of competitive advantage must meet three conditions. Firstly, the output from these valuable resources is willingly purchased by buyers at a price far higher than the costs incurred in bringing it to the saleable state. Secondly, it is scarce because it is subject to limited supply. Thirdly, it is difficult for competitors to either imitate or purchase the resources.

In strategic analysis a firm's resources are strengths that firms can use not only to create wealth but also to implement their value creating strategies (Porter, 1980; Barney, 1991). The primary task here is strategy formulation for maximising rents over time. These returns depend upon two key factors:

- a) for sustainable competitive advantage durability, transparency, transferability and replicability are important determinants and,
- b) the appropriation of returns which is concerned with the allocation of rents where property rights are not fully defined, for example, the relationship between individual skills and organisational routines (Grant, 1991).

The direct link between resources and profitability is twofold. The first looks at what opportunities exist for economising on the use of resources. These resources are tangible and maximising productivity is the key in this case. The other looks at the possibilities of using existing assets more intensely and in more profitable employment. Strategic industry factors such as barriers to entry, buyer/supplier power, intensity of competition, and substitutes (Porter, 1980) impact on firms and influence the selection and deployment of resources to use.

Features of the resources are important ingredients for above normal rent generation potential of resources. The identification of characteristics, such as whether a resource is scarce, unique, non-tradable, inimitable, durable, idiosyncratic, and non-substitutable (Rumelt, 1984; Barney, 1991; Mahoney and Pandian, 1992; Peteraf, 1993; Amit and Schoemaker, 1993), are important determinants for above normal profit generation and sustainable competitive advantage.

A number of authors have generated lists of firms resources. Barney (1991) classified three categories of firm resources: physical capital resources (Williamson 1975); human capital resources (Becker, 1964) and organisational capital resources (Tomer, 1987). Physical resources include physical technology, plant and equipment, geographic location, and access to raw material. Human resources include training, experience, judgement, intelligence, relationships and insights of individual managers and workers in a firm. Organisational resources include the firm's formal reporting structure, together with its planning, controlling and co-ordination systems. Six major categories of resources recognised by Hofer and Schendel (1977) are financial, physical, human, technological, reputation, and organisational resources, indicating resources are tangible and intangible in nature. A summary of resources is displayed in Table 3.1. However, not all resources are strategically relevant resources. Only those attributes of physical, human, and organisational resources that enable a firm to create and implement strategies which help improve efficiency and effectiveness are classed as firms resources (Wernerfelt, 1984; Barney 1991). Moreover, recent literature on the possible links between RBV and other disciplines has added more types of resources to the above list, for example, market based assets of relational and intellectual (Srivastava *et al.*, 2001) and entrepreneurial belief about the value of resources being resources (Alvarez and Busenitz, 2001).

The main purpose here is the selection and the conditions under which such firms resources can be a source of sustainable competitive advantage for the firm. Thus the firms resources must be heterogeneous and immobile. To exploit this potential Barney (1991) has suggested resources must possess four attributes: they must be valuable; rare; imperfectly imitable and without substitutes.

Table 3.1 Type of Resources

Physical Resources¹	Human Resources²	Organisational Resources³	General Resources⁴
Technology Plant & equipment Geographic Location Access to Raw Materials	Training Experience Judgement Intelligence Relationships	Reporting Structure Planning Controlling Co-ordinating	Financial Physical Human Technological Reputation Organisational

Source: ¹Williamson (1975)

²Becker (1964)

³Tomer (1987)

⁴Hoffer and Schendell (1977)

According to Dobson & Waterson (1996), economies of size and scope give larger retailers a cost advantage over smaller rivals. This is due to falling fixed costs facilitated by increases in sales and buying economies thereby reducing the variable costs of purchases. Economies of scope arise from various product lines sharing fixed costs through common display and storage facilities. However, both economies of size and scope are generated from highly specific assets in the form of outlets. Miller *et al.* (1999) suggested that regardless of whether scale or saturation is examined, the size of the competitive effects is greater when store types are adjacent in the degree of end use

consistency of product line, undirectional from the lowest to the highest consistency. Retailer outlets meet the first condition i.e. become valuable and a source of competitive advantage as its outputs are willingly purchased by buyers at a price far higher than the cost incurred in bringing it to the saleable state. Heavy investment in retailing has seen in the recent past the rapid growth of outlets in the form of supermarkets and hypermarkets, the expansion of out of town and edge of town retail parks and the demise of some smaller shops too. This means that these tangible specific assets are costly to redeploy to alternative uses (Williamson, 1991).

Resource specificity has also other uses in industry. This is particularly useful for firms wishing to diversify (Grant, 1991). A resource used to produce only one product is unsuitable for diversification. On the other hand, if this resource can be used in producing more than one end product, its flexibility gives it the option of either more or less related diversification. Hence it is this determinant that directs firms on deciding the type of diversification to follow (Montgomery and Wernerfelt, 1988). The work carried out by Chatterjee and Wernerfelt (1991) on the links between resources and the type of diversification considered three classes of resources: physical resources; intangible resources and financial resources. Excess resources in physical, knowledge, and external finance are associated with related diversification, whilst internal resources are related to unrelated diversification.

Firms grow not only through internally generated slack but also from acquisitions and mergers. When substantial expansion is not possible through organic change, acquisition may be the answer. Acquisition is a way of reconfiguring the capabilities of both acquiring and acquired firms. For a path dependent change acquisitions deepen the existing resource base of firms over long period of time. A path breaking change however

extends firm activities into areas that require very different resources (Karim and Mitchell, 2000).

Retailer location effects permit supernormal returns to their locations but are not sufficient to permit potential entrants to make believe they could push established firms out of their lucrative locations. Carroll's (1985) resource partitioning model proposes that intratype competition between larger generalists results in positive effects on specialists whilst minimum differentiation expanded from Hotelling (1929) works suggests that similar firms benefit by forming agglomeration. Ghosh (1986) on the other-hand suggests intertype and intercategory competition enables customers to multipurpose shopping. The multipurpose shopping theory suggests the agglomeration of dissimilar types of retailers will result in double the profits of stores in independent locations. Good locations can increase potential sales and a slight difference in location can have a significant impact on market shares and profitability (Ghosh and McLafferty, 1987).

Hence the location effects enables consumers to:

- a) make comparisons between shops,
- b) reduce transaction costs,
- c) maximise utility by locating an ideal bundle of goods rather than 'satisficing' on limited selection availability.

The outlet performances are directly related to market demand. Capacity utilisation is closely related to scale and is both a cost and value driver (Stabell and Fjeldstat, 1998). Furthermore concentration levels in the UK retailing sector imply that the number of firms that possess a bundle of valuable outlets is less than the number of firms needed to generate perfect competition dynamics (Hirshleifer, 1980) thus making outlets a rare resource.

A resource-based view proposes that resource selection and deployment are a function of both internal firm decision making and external strategic factors. Economic rationality and motivations guide managerial choices within the firm on profitability, efficiency and effectiveness (Conner, 1991). Strategic industry factors i.e. buyer supplier power, intensity of competition, industry and product market structure (Oliver, 1997) on the other hand impact on firms and influence the selection and deployment of resources to use. These two factors influence the rent generation potential of a firm. However a firm's decision to select, accumulate and deploy resources and capabilities is based on economic rationality constrained only by limited information, cognitive biases and causal ambiguity (Oliver, 1997; Ginsberg, 1994; Amit and Schoemaker, 1993; Peteraf, 1993). On the other hand the firms ultimate strategies on heterogeneity or homogeneity could include what is socially acceptable economic behaviour at that time. Oliver (1997) contends that although the context and processes of resource selection is important to firm heterogeneity and sustainable competitive advantage, a firm's ability to manage the social context of its resource selection process is important to sustaining competitive advantage.

Value determination is exogenous to RBV but the focus on heterogeneity in beliefs about the value of resources by Alvarez and Busenitz (2001) suggests that value maximisation is internal to the firm. The recognition of opportunities and the ability to organise resources into the firm and the creation of heterogeneous outputs through the firm that are superior to the market will thus drive retailers to select and deliver values appropriate to the firm. Aspirations regulate organisational investments in learning and the firm's future capabilities may emerge as a result of various degrees of aspirations between firms. However, once the learning process ends firms may experience poor performances and refuelling may be needed. Hence the varying levels of firms aspirations contribute to heterogeneity in firm capabilities, independent of the differences in learning

abilities or initial conditions. Winter (2000) argues that poorly positioned firm's move fastest to adopt new techniques. Whilst Rosenbloom, (2000) on the subject of change states that the individual leadership may be a central element of dynamic capability. This could be experienced when a firm is trying to adapt to revolutionary technological change in its major line of business when it appoints a new managing director.

Managers make value maximising decisions based on choices available to them constrained only by institutional factors (Oliver, 1997). The rules, norms, and beliefs surrounding economic activity define or enforce socially acceptable economic behaviour at three levels:

- a) at the individual level institutional context includes decision makers norms and values,
- b) at the firm level, it includes organisational cultures and politics,
- c) at the inter-firm level regulatory pressures and industry norms are prevalent.

Institutionalists claim that at the individual level the assumption is that managers make non-rational choices influenced by force of habits, social judgement and historical limitations. Normative rationality tends to lead to sub-optimal resource decisions and sub-optimal use of accumulated resources as human behaviour stretches beyond economic rationality to social justifications and obligations (Zukin and DiMaggio, 1990). It is this difference among firms in their management of normative rationality that creates a source of competitive advantage (Oliver, 1997).

Conformity to social expectations contributes to organisational success and survival (Baum and Oliver, 1991). Organisational success is the measure of the extent of compliance to social expectations, and the rewards are increased legitimacy, resources, and survival capabilities (Scott, 1987). The management of social constraints, which affect resource optimisation, use and procurement, can vary between firms resulting in

firm heterogeneity. Institutional isolating mechanisms now act as barriers to imitations stemming from the firm's reluctance to imitate or acquire resources incompatible with the firm's culture or political context. A firm thus foregoes the opportunity to own resources and capabilities, that support a competitive advantage (Oliver, 1997).

The firm's objective is value maximisation i.e. maximisation of the net present value of future profits. Value maximisation in retailing arrives through scale (size of stores), saturation levels (number of stores per 1000 households), and personal service levels (quantity and quality) (Miller *et al.*, 1999). The size and saturation levels will vary from region to region as retailers form markets locally. The total number of outlets depicts the total volumes traded and hence the market shares of retailers. Dobson & Waterson (1996) have observed that concentration in retailing in the UK has increased in the recent past mainly due to the capabilities of a handful of firms to dominate their respective industries by controlling large slice of the market. They also provided some evidence of the direction and upward movement of gross margins in line with concentration ratio i.e. market shares. This implies economic concentration through economies of scale and scope are connected to market power at local and/or national markets (collection of local markets). Superior gross margins are the result of:

- a) volumes traded,
- b) mix of products (portfolio) and,
- c) prices charged.

Based on the capacity available to the firm, management can set standards for computing variance analysis in order to capture variation in profits and/or market shares of their value creating strategies. In this channel the variation in profit that emerges from product portfolios individual to the firm can be analysed from the following formulae

which is based on variations of sales price, sales volume and sales mix (Wilson and Chua, 1988).

- a) Sales price variance = Actual units sold * (Actual price – Standard price),
- b) Sales volume variance = Sales quantity variance + Sales mix variance,
- c) Sales quantity variance = Budgeted profit on budgeted sales – Expected profit on actual sales,
- d) Sales mix variance = Expected profit on actual sales – Standard profit on actual sales.

The variance relating to sales volumes can be attributed to differences between:

- 1) Actual and anticipated total market size; and
- 2) Actual and anticipated market share

This takes into account the impact of market size and market penetration variations.

- 3) Market size variance = $(Ma - Mp) * Sp * Cp$
- 4) Market share variance = $(Sa - Sp) * Ma * Cp$
- 5) Volume variance = Market size variance + Market share variance

Where: Ma = actual total market in units

Mp = planned total market in units

Sa = actual market share

Sp = planned market share

Cp = actual contribution per unit.

Proposal 1: Competitive advantage is associated with key resource(s) (KR)

3.4 Competitive Behaviour and Competitive advantage

Examination of the nature of competitive behaviour is important to understanding competitive advantage. For the purposes of valuing resources and capabilities it is

necessary to use theoretical tools that specify the market conditions under which different resources will or will not be valuable (Barney, 2001). The RBV's role here is to look inside the firms to establish how, why or what caused heterogeneity in the firm performances. With this in mind, a formal approach to the modelling of competitive behaviour is sought after for understanding the behaviour of free economic agents.

The development of a conceptual framework by Wensley, (1998) for modelling of competitive behaviour approach suggest that the following areas should be defined: firstly, the nature of the arena in which the competitive activity takes place; secondly, the structure or rules which govern the behaviour of the participants; and finally, the options available in terms of competitive behaviour.

There are four types of generic models of competition: game theory, evolutionary ecology, sports games, and military conflict. They are all informative, but only game theory and evolutionary ecology will be considered in the present study.

With all models describing competitive activities, economic rationality is the key point for decision making. Some models assume weak rationality i.e. take actions in line with their strategic plans, whilst others assume a stronger form where the intentions of agents can be expressed in terms of various economic measures such as sales, growth, profit, or market share objectives. Rationality thus implies a link between actions and intentions, but not common intentions between competitors (Wensley, 1998).

Game theory models describe the evolution of competitive behaviour strategies. The feature of a game theory model is that it is governed by a set of rules. These rules describe:

- a) the number of firms competing against each other,
- b) the number of actions each firm can take at each point in time,
- c) the profit each firm can achieve with each competitive action,

-
- d) the time pattern of actions, where there is an early mover or simultaneous action and,
 - e) the nature of information about competitive activity.

Moreover, the results of this model predict how a firm should behave and depend on a given set of assumptions on alternatives strategies, their pay-off, and the prescription for optimal solution (Kadane and Larkey, 1982).

In the Industrial Organisation (I/O) economics literature, basic game theory has been extended to develop a greater understanding of the nature of competitive behaviour. Assumptions of homogeneous firms and customers have been relaxed as neither the firms nor the customers are alike. This has led to the Industrial Organisations dominant paradigm known, as structure-conduct-performance (SCP), which suggests a firms performance is the result of competitive interactions. The conduct of firms is determined by the structure of the industry where the firms compete and identifies a set of industry conditions that have impacts on both behaviour and performance of firms. Hence it is the industry structure and the industry conditions which are the sources of competitive advantages.

The conduct is determined by the structure of the industry where the firms compete and is based on the decisions made by the individual firm on for example, prices, building capacity, advertising capacity, and the investments in research and development. Structure is measured by the properties of the industry. These properties are for example are, number and size of firms (concentration), advertising intensity, capital intensity, concentration of suppliers and customers, the extent of product differentiation and barriers to entry. The SCP paradigm thus identifies a set of industry conditions that affect competitive behaviour and firm performance approaches, which separates competition from competitors. Furthermore, Hunt (1972) has demonstrated that competition occurs between strategic groups and that not all firms compete vigorously with each other.

Evolutionary Ecology is a means of describing the competitive process (Henderson, 1983) and is useful for understanding the types of competitive strategies and the type of firms in an environment. The two alternative strategies described are termed as r and k strategies and are explained by Wensley (1998) as follows.

The r-strategists enter a new resource space at an early stage when few competitors are present. They are flexible and inefficient due to lack of experience, whereas k-strategists join later after several r-strategists have entered a new environment. The k-strategist enter this new environment with their extensive experience and exploit their advantage of greater efficiency. These environments have two dimensions, namely variability and frequency of change. In a high velocity environment changes are spectacular and firms use different strategies for survival and is believed to be suitable for a specialist strategist who can exploit high performance in a narrow portion of the environment. The r-specialist are small organisations favouring first mover advantages than efficiencies whereas k-strategists are small but new organisations focusing on exploiting stable narrow areas based on efficiencies. In a low velocity environment strategic alterations are very minimal and infrequent thus suiting a generalist strategist to exploit large scale efficiencies. The r-generalists are larger and established organisations that can exploit new opportunities from either altering their current activities or by making minor expansions to their existing business. Whereas, the k-generalists are large organisations, competing on efficiencies on a large scale, based on their experiences in related areas.

It was stated earlier that firm performances were the result of competitive interactions and both structure and conduct of firms depend on industry conditions. In retailing, market factors determine retail structures (Hirschman, 1978; Ingene, 1983; Ingene & Brown, 1987). The market structure entails the demographic characteristics of

the customers and environmental factors in a trade area (Bucklin, 1972). The retail structure is defined as the manner in which firms engage in the trade of a commodity and its construction includes retail stores by size, mix, and the distribution of retailers within a geographic area (Bucklin, 1972). Retail structures associate consumers. Consumers adapt their shopping habits to signal both time needs and mobility (Albaum and Hawkins 1983; East *et al.*, 1994). Retail structures are thus responsible for quality, price and selection of products available to consumers (Miller *et al.*, 1999). Retailers fundamentally operate in local markets and the relevant markets may be as large as a city or small region (Porter, 1976). The features of retail markets as per Winter (1993) are as follows:

- a) The role of retailer's services is to reduce consumers opportunity costs especially the time costs of obtaining the product.
- b) The varying travel and search costs to and in outlet locations force retailer differentiation.
- c) Consumers are heterogeneous in their opportunity costs of time.

There are two schools of thought regarding competitive interactions and retail structure. One school of thought relates to 'symbiosis' and the theories from this school hold that retailers have mutual beneficial effects on each other. The other refers to 'darwinism' and suggests that retailers compete fiercely with each other on a survival of the fittest basis. However Miller *et al.* (1999) contend that symbiosis and darwinian schools predict contradictory outcomes depending on specific competitive situations.

The competitive interaction among retailers is commonly described as either intratype or intertype. Levy and Weitz (1998) define intratype competition as competition between the same type of retailers selling similar merchandise and intertype as between different types of retailers selling similar merchandise. Dunne and Lusch (1999) describe intratype competition as between stores within the same (SIC) code. Mason, Mayer, and

Wilkinson (1993) define intratype competition according to the type of competition i.e. retailers competing against each other for the same household goods. Hirschman (1978) defines intratype competition based on product line similarity whereas Ingene (1983) classification stretch to intraindustry, interindustry, intragroup and intergroup.

Furthermore Miller *et al.*, (1999) state that researchers have yet to reach consensus on various definitions of retail competition. They argue that the lack precise taxonomy on retailer types leads to nonexclusive categorisation of competitive interaction among stores. For example they use an example of the competitive interaction between BO Peep Books and a Barnes and Noble bookstore to highlight the lack of precise classifications. Under the existing definitions of retailer competition Hirshman (1978) and Dunne and Lusch (1999) would have classified the above competition as intratype whilst Levy and Weitz (1998), Ingene (1983) as intertype and intraindustry competition respectively.

The ambiguity in the definition of the retailer types has lead to yet another definition of competitive interactions among stores. Miller *et al.* (1999) now define the three types of retail stores using a product consistency approach, for example how closely related product lines are to end use (Kotler & Armstrong, 1996). Their definitions are as follows:

- a) *Limited-line* specialists offer the highest level of consistency of product lines to fulfil specific product market end use needs.
- b) *Broad-line* specialists offer broader level of consistency of product lines to fulfil complementary and more generic market end use needs.
- c) *General merchandisers* offer relatively inconsistent product lines to fulfil non-complementary and independent market end use.

Miller *et al.* (1999) classify intratype as competition between the same types for example, limited line versus limited line, broad line versus broad line selling similar

merchandise, intertype as between limited line and broad line selling similar merchandise and intercategory as between specialist and general merchandisers selling similar merchandise.

The firms conduct in a market place is the result of competitive interactions, whilst it has already been indicated that all firms are not alike. The concept used here is that competition can be isolated by using three methods i.e. the strategies of differentiation, cost efficiency, and collusion as not all firm compete vigorously with each other. Competitive advantage can take shape when strategic fit complements competitive positioning. To this extent, firms follow competitive strategies such as cost focus, product differentiation, market focus or a combination of competitive strategies (Porter, 1980). The pre-requisites for cost advantage are scale efficient plants, superior process technology, low cost sources of raw materials, and low cost labour. The presence of differentiation advantage on the other hand relates to brand reputation, product technology, marketing, distribution, and service capabilities (Grant, 1991). The main variable relating a firm to its competitors is its relative market share (Buzzell *et al.*, 1975) and this takes into account the competitive positioning effect, which explains 32 per cent of the variation in profit between firms (McGahan and Porter, 1997).

When the industry advances through its life cycle, some firms experience the concept of strategic groups and the concept of mobility barriers (Hunt, 1972; Caves and Porter, 1977). Hunt (1972) suggested that not all firms within an industry compete vigorously against each other. The ferocity of competition occurs between firms who have similar strategies (Porter, 1980). Parallel strategies are the result of institutional influences exerted on firms by governments, professional associations, and other external bodies to conform, define or prescribe socially acceptable behaviour (Oliver, 1997; Scott, 1995). Similarities happen over time as firms within a group conform to common

influences and relationships that diffuse common knowledge and understanding (Jepperson, and Meyer, 1991; Oliver, 1988). The purpose of isomorphism pressure (Meyer and Rowan, 1977) is to reduce firm heterogeneity.

In retailing Hirshman (1978), argues that stores arrange themselves in a three tier price quality continuum in which direct competition remains within each tier. These firms appear to have similar market powers, which bring out tangible barriers to entry through scale economies, patents, experience advantages, brand reputation etc. These barriers can only be acquired slowly over time or at an inconsistent expense (Grant, 1991).

The Chicago approach considers the retailing function as perfectly competitive whereas Dobson and Waterson (1996) argue that perfect competition is not evident in most areas of retailing and that retailer market power, at least in a limited form is the likely norm. The need for economies of size and scope, barriers to entry and national market power has led to sharp increases in concentration. Concentration in the retail channel in the UK has led to a handful of retailers holding large market shares and this facilitates buying power with impacts on the producers/suppliers and is a concern for the regulators. Generally, the volumes purchased by the retailers usually equals the volumes purchased by other large buying groups but in some industries retailer purchases outweigh other buyer groups. Such an imbalance triggers retailer power through concentration thus implying increased ability to exercise buying and selling power in a collection of markets.

In contrast smaller retailers may compete with larger retailers by competing in local markets successfully differentiating themselves from their rivals and may have greater market power than large retailers in direct competition with neighbouring retailers (Dobson and Waterson, 1996). Moreover Dobson and Waterson (1996) state that the influences of small independent establishments have substantially diminished in recent

times as the exploitation of economies have led to a few firms controlling a considerable slice of the market. A recent study by Miller *et al.* (1999), however, implies that there are mutually beneficial relationships among different types of retailers rather than an overwhelming competitive advantage for larger stores.

The pressure for manufacturers to gain access to the retail level is becoming increasingly intense as manufacturers step up product proliferation. (Dobson & Waterson, 1996). They further state that multiproduct retailers have now become insulated from the threat of individual manufacturers extending vertically as the demand for multiproduct retailing is on the increase and the replacement of individual suppliers can take place with minimal disruption. This situation may lead to manufacturers/suppliers seeking less efficient retailers

Proposal 2: Competitive advantage is associated with competitive behaviour (CB).

3.5 Capabilities and Competitive advantage

Capabilities are defined as the firm's capacity to deploy resources in combination, using organisational processes, to effect a desired end (Amit and Shoemaker, 1993). A capability is the capacity for a team of resources to perform an activity. Creating capabilities is not a simple process of assembling a team of resources. Capabilities involve complex patterns of co-ordination between people and other resources. Capabilities are the main source of its competitive advantage (Grant, 1991). Capabilities are 'things firms have or are things firms do' or 'are activities a firm does better than another firm' (Besanko *et al.*, 2000). The ability of the firm to transform itself to meet current and future challenges is the process through which capability profiles are developed.

The transformation process pursued by a firm is classified into two broad categories, namely adaptive specialisation and adaptive generalisation (Chakravarthy, 1982). Adaptive specialisation is the process of improving the goodness of fit in a given state of adaptation where established firms exploit profitable opportunities in their current environment. Rationalisation of organisational processes and structures takes place to ensure the use of both material and organisational capacities are moving to the nearest adaptive fit. Firms will enter the industry and erode away the supernormal profits by imitation. However firm strategies will be based on their capability profile and some firms could experience difficulties of adoption and change in capabilities. Hannan and Freeman (1989) argue that the initial conditions determine firm capabilities as environmental changes favour some bundles of firm resources over others. Cockburn *et al.* (2000) on the other hand analysed that the starting conditions and the responses of firms to environmental conditions affect the rate of adoption.

Competitors will emerge to erode heterogeneity through imitation. New firms might enter the industry and established firms could just survive or even divest as the industry progresses through its life cycle. The likelihood of entry, the amount of innovation, and the exit from the industry are closely connected to the pre-entry experience of these firms. According to Klepper and Simons (2000) firms that dominate the industry not only entered the industry early but also had pre-entry experience in relatively similar businesses, for example, home radio producers entering the television industry. However the first entrants into agglomeration will attempt to block similar stores to protect the exclusivity of benefits. Ghosh (1986) states that although multipurpose shopping supports 'symbiosis' for inter-type and inter-category competition, it brings in 'darwinism' for intra-type competition.

There are two kinds of tangible isolating mechanisms namely impediments to imitation and early mover advantages. Impediments to imitation are legal restrictions, superior access to inputs or customers, market size and scale economies, intangible barriers and strategic fit. Early mover advantages include the learning curve, network externalities, reputation and buyer uncertainty, and buyer switching costs (Besanko *et al.*, 2000).

There are also the conceptually distinct intangible barriers to imitation, such as causal ambiguity, dependence on historical circumstances and social complexities. These barriers are installed by a firm's causal ambiguities, dependence on historical circumstances and social complexities become shields for protecting firm heterogeneity. However these intangible barriers to imitation are erected over time by personal relationships internal and external to the firm.

Firms invest in specific assets to promote co-operative arrangements with other firms. These arrangements are meant to reduce opportunism, and are, subject to firm dependency on the use of specific assets and thereby the cost of inter-firm co-operation. Exclusive dealing facilitates superior access to inputs and is an impediment to imitation. However if opportunism arises, the firm is faced with a choice of continuing to work with the partner or foregoing the expected value of its specific assets (Combs and Ketchen, 1999). Additionally, investors in highly specific assets incur sunk costs and therefore face exit costs too. Sunk investments are likely to be associated with different forms of assets specificity in many retail markets (Williamson, 1986).

Recent economic analysis of exclusivity arrangements has revealed that such practices can increase efficiency and reduce competition (Marvel, 1982; Steuer, 1983 and Ornstein 1989). Exclusivity (EX) has practically unlimited capacity (Wernerfelt, 1989). Exclusivity brings in the social element of inter firm relationships (Oliver, 1997). For

large retailers, exclusivity arrangements are necessary for ensuring supply and may profitably dampen competition between retailers. This process allows retailers to specialise in selling different brands or products in order to avoid head to head intrabrand competition notably when economies of scope are low in retailing (Dobson and Waterson, 1996a).

Exclusive dealing promotes supplier hierarchies through which risk elements attached to quality and delivery are transferred to the preferred suppliers. Furthermore the retailer controls the technology requirements without carrying the burden of ownership and their extensive financial powers facilitates bulk buying with large discounts. These differentiated service capabilities make large retailers inimitable and consumers are made to view them as imperfect substitutes (Dobson and Waterson, 1999).

Exclusive dealing may also be an entry barrier into retailing and arises when at least one manufacturer has low marginal costs of production. The entry deterrence model of Comanor and French (1985) indicates that the foreclosing manufacturer purchases the retailing barrier to entry and converts it into a manufacturing barrier to entry. By contrast Mathewson and Winter (1987) point out that the retailing barrier allows the manufacturer to exercise its low cost advantages to exclude other manufacturers.

Proposal 3: Competitive advantage is associated with inter-organisational capabilities (IOC).

Valued resources and capabilities can be built up through cumulative learning within the firm (Cool and Dierickx, 1994). A firm can accumulate specialised capabilities over time (Barney, 1991) creating intangible barriers to imitation. Intangible barriers exist when the firms advantages, which lie in their distinctive organisational capabilities, cannot be explained easily. Capabilities may reside within a business function; alternatively they may be linked to technologies or product designs. They may also reside

in the firms ability to manage linkages between elements of the value chain (Besanko *et al.*, 2000).

Experiences gained from learning and the reputation gathered by retailers on experience/credence products together with the location effects, lead to incumbency advantages (Dobson and Waterson, 1996). For retail outlets one of the key activities is the time taken to accomplish exchange from the time point of placing an order. It includes several activities within the product channel and is driven by teams of resources (Grant, 1991). The functions of the product channel comprises of: a) inventory management, b) material handling, c) communication and order processing, d) transportation (Stash, 1972). The workings of the four functions collectively indicate how well the flow for exchange is accomplished i.e. logistics policy and support.

Strategic fit creates a powerful barrier to imitation (Porter, 1990). Strategic fit exists when firm activities form a coherent, mutually reinforcing whole. To successfully imitate a firm with activities driven by strategic fit, a rival has to align their entire system of activities (Besanko *et al.*, 2000). Rumelt (1984) coined the term 'isolating mechanism' which refer to the extent to which the economic forces can limit the duplication or the neutralising of competitive advantage by a firm's resource creating activities.

Proposal 4: Competitive advantage is associated with key organisational capabilities (OC).

Adaptive generalisation on the other hand refers to the process that improves the survival potential of the organisation. It is the aim of adaptive generalisation to enhance the material and/or organisational capacity of a firm as required moving it to the next higher state of adaptation (Chakravarthy, 1982). The localized competition model by Baum and Singh (1994), suggests that lower failure rates amongst organisations is present when there is less overlap of resource bases. The potential for adverse competition among

organisations is the function of the overlap of resource bases for example customer demand, labour and financial needs. Based on resource partitioning and localised competition models, Miller *et al.* (1999) propose that different types of retailers will thrive in each other's presence due to the lack of competition for resources. A successful firm adaptively fitted with its environment will generate a surplus of contributions over the inducements. It is the investment of this surplus slack (Cyert and March, 1963) in the improvement of its ability to counter uncertain futures that is the main concern of adaptive generalisation. Some established firms will use this slack to invest heavily on research and development of key assets with the future in mind, whilst other firms may pursue adaptive specialisation i.e. short-term profitability distributing slack to keep shareholders happy. The difference between the two policies is that one grows into the next state of fit, whereas the other stagnates into the homogeneous state. What creates heterogeneity is finding the balance between short-term profitability and the investment of slack for longevity. However firm investment of slack is hard to identify and profitability ratios do not always tell the whole story. A better indicator of a firm path may be found by scrutinising the elements of working capital. This is where the importance of the inclusion of working capital (short-term resources) comes into play.

The working capital capabilities are the capacity that is available to a firm to compete. These capabilities facilitate the key role of strategic management which is to adapt, integrate, and reconfigure internal and external organisational skills, resources, functional competencies to match the requirements of a changing environment using systems of learning that constitutes dynamic capabilities (Teece *et al.*, 1997).

Dynamic capabilities are a set of specific and identifiable processes relating to a firm and are path dependent in their emergence and have significant commonalities across firms. This means they are more homogeneous, fungible, equifinal and substitutable

(Eisenhardt and Martin, 2000). Superior dynamic capabilities are likely to have competitive advantage over other firms in the short term, and are not a sufficient condition for competitive advantage. Dynamic capabilities are not a source of long term competitive advantage but they are tools available to managers to manipulate existing resource configurations to build new resource configurations depending on what competitive position a firm is experiencing at that time (Eisenhardt and Martin, 2000).

To develop strategic assets firms require working capital. The outlet performances are directly related to market demand and capacity utilisation is closely related to scale and is both a cost and value driver (Stabell and Fjeldstat, 1998). To this extent value maximisation is one of the prime targets of management and sustaining value requires that the condition of heterogeneity be preserved. In order to achieve this status firms must set *ex ante* limits to competition as competitive forces could limit competition for those values (Peteraf, 1993). Moreover Peteraf (1993) also argues that prior to a firm establishing a superior resource position there must be limited competition for that position. This means there must be *ex ante* limits to competition and the cost of implementing strategies via other resources should not erode away the anticipated returns. This is where the hidden firm is at work, planning its future in meeting its desired end.

Elements of working capital include short-term resources for example stock, debtors, cash whilst creditors provide the short term funding for the firms. However policy decisions relating to the size of these resources and funds have long-term implications for retailers and may be subject to activities within the elements of working capital. These product/non-product activities will relate not only to the capabilities of key resources installed by the firm, but also to the industrial economics central concern of identifying actions that minimises the cost of governance and economic exchange which in turn maximise performance. In other words, if a firm is to have competitive advantage,

it has to implement a value creating strategy not simultaneously implemented by current or potential competitors.

The firm's strategy in this case links up to products on offer. If, for example, a retailer delivering customer values from efficient product portfolios that maximise returns and/or increase market shares may have stock turn ratios far higher than those delivering customer values from inefficient product portfolios. On the other hand Besanko *et al.* (2000) state that products could be close substitutes if they can meet three conditions namely:

- a) They have the same or similar product performance characteristics.
- b) They have the same or similar occasions for use.
- c) They are sold in the same geographic market.

Close substitutes however have the potential to reduce rents.

The pressure for manufacturers to gain access to the retail level is becoming increasingly intense as manufacturers step up product proliferation (Dobson & Waterson 1996). The authors state further that for example in food retailing, the number of products sold through supermarkets has doubled since the 1980s and the number of new products launched has increased at an even faster rate as manufacturers step up the extent of product proliferation. In such circumstances, manufacturers have little alternative but to offer substantial discounts to large retailers. Vertical extensions thus become difficult for the manufacturers due to the high number of product lines and fixed cost diffusion. This connotation highlights not only the shifting of the balance of power but also the extent to which retailers can threaten to replace existing suppliers with minimal disruption.

On the other hand retailer differentiation could be created from value creating strategies that relate to non-product activities. The characteristics of manufactured goods may be relatively straightforward to specify, but the factors that differentiate retailer

services are less obvious and yet, the retailers are viewed by consumers, as imperfect substitutes (Dobson and Waterson, 1996). The task of the marketing manager is to develop and execute a marketing plan that makes the firm's product offering different to competitive offerings allowing the firm to shield itself from competition (Boulding and Lee, 1994). The authors also state that once the product design with desired attributes is introduced into the market, any subsequent design changes would be costly and time consuming. Accordingly, marketing managers often attempt to alter customer perceptions regarding uniqueness and desirability of their existing product offerings by means of other elements of the marketing mix for example advertising, promotions, personal selling and these non-product activities lead to differentiation and also reduce price competition (Boulding and Lee, 1994).

To this extent retailer strategies may be pointed at retail branding as multiproduct retailing is on the increase. Retail branding has the double benefit of differentiating services on the selling side as well as from the buying side too. The main aim of this strategy is to countervail the selling power of the supplier brand (Dobson and Waterson, 1996). Furthermore Ghemawat (1986) argues that inimitable positions derive from size advantages, preferred access to resources and/or restrictions on competitors options. This means if close substitutes were present in an industry, retailers may wish to implement strategies that could restrict competitor ability to dissipate anticipated returns.

The stocks held in warehouses/stores need to be converted into cash as soon as possible. The facilitation of instant purchases, especially for expensive consumer durables may require a method of payment that is suitable for customers for example consumer credit. To this extent firms may use their healthy balance sheets to fund consumer credit. On the other hand if the trading is on a large-scale firms may even set up subsidiary companies for the provision and management of consumer credit. Given this situation the

retailers may be interested in capturing customers by implementing a value creating strategy that does not rely on the selling power of supplier brands.

The role of retailers stretches to other features of the retail market especially the services that reduces consumers opportunity cost of getting the product where consumers are heterogeneous in their opportunity cost of time. According to the consumer heterogeneity theory the mix of these instruments that maximises collective profit is determined by the tastes of consumers on the 'product margin,' and their own margins/'interretailer' margins (Winter, 1993). Retailer preferences are based on factors such as the respective instore services, merchandise mix, quality of goods, and methods of doing business (Hotelling, 1929).

Moreover Winter, (2001) argues that retailers rely on low prices to attract any given number of customers. Firms that charge above average prices are assumed to have a unique, sustainable price advantage. For these firms, promotional activities focus consumers attention on price, an attribute inherent to all brands. The provision of such information by the seller lowers the customers search costs and is believed to lead to lower differentiation (Nelson, 1974). On the other hand Boulding and Lee (1994) suggest that for firms pricing above the industry average, the current advertising and sales force activities increase future differentiation and decrease future price competition, whereas current promotional activities decrease future differentiation and increase future price competition.

However having set up the consumer credit facilities the retailer then needs to implement a value creating strategy that would entice the customers into their stores. For these purposes the implementation of a strategy that is independent of the selling power of the supplier brand may be required. The facilitation of such a strategy may be aimed at weakening the selling power of some popular supplier brands especially if the retailer has

the opportunity to purchase cheaper brands for example cheaper foreign imports that can perform the same task.

Proposal 5: Competitive advantage is associated with strategic adaptive capabilities (SAC).

3.6 Hypothesis

3.6.1 Introduction

Strategic complexity requires general models and the strategist job is to find a match between the environment, organisational resources and capabilities (Priem & Butler, 2001). Finding a match requires the understanding of the structural features of an industry. The RBV indicates that the industries structural features are the result of the organisational capabilities of its constituent firms, which have accumulated over time (Cockburn *et al.*, 2000). On the other hand the SCP suggests the conduct of firms is determined by the structure of the industry where the firms compete. The structure is measured by the properties of the industry for example, the number and size of firms, advertising intensity, capital intensity, concentration of suppliers and customers, the extent of product differentiation and barriers to entry. The conduct is thus determined by the decisions made by the individual firm for example, prices, building capacity, advertising capacity and the investments in research and development.

In order to determine the sources of competitive advantage it is necessary to probe into the market structure of the domestic appliance market in which retailers attempt to deliver customer values from product portfolios of white goods that maximises their returns and / or increase market shares. The market structure involves the demographic characteristics of consumers and the environmental factors that facilitate that structure (Bucklin, 1972). Furthermore the market factors within the market structure thus

determine the retail structure that meets the needs of the consumers (Bucklin,1972; Hirschman, 1978).

3.6.2 Sources of Competitive Advantage

Dobson & Waterson (1999) contend that perfect competition is not evident in most areas of retailing and that retailer market power at least in a limited form is the likely norm. Moreover they argue that retailer heterogeneity is created from barriers to entry, economies of scale/scope, national and local market powers exclusivity arrangements and retailer differentiation of services.

Therefore it is necessary to examine the type of competition that exists in the domestic appliance market in order to determine whether there are any sources of competitive advantage that could be exploited if the market was imperfectly competitive. As stated earlier a model of perfect competition could facilitate comparison.

Having established the possible sources of competitive advantage in the domestic appliance market it is important to scrutinise the shared resources and capabilities of firms that are associated with competitive advantages in the retail channel for white goods. Based on the sources of competitive advantages mentioned above it is now necessary to identify key resources that have the ability to manipulate other resources and capabilities that deliver customer values from product portfolios that maximise returns and / or increase market shares for the shareholders. Figure 1 below depicts a competition model that would facilitate scrutiny.

A Competition Model

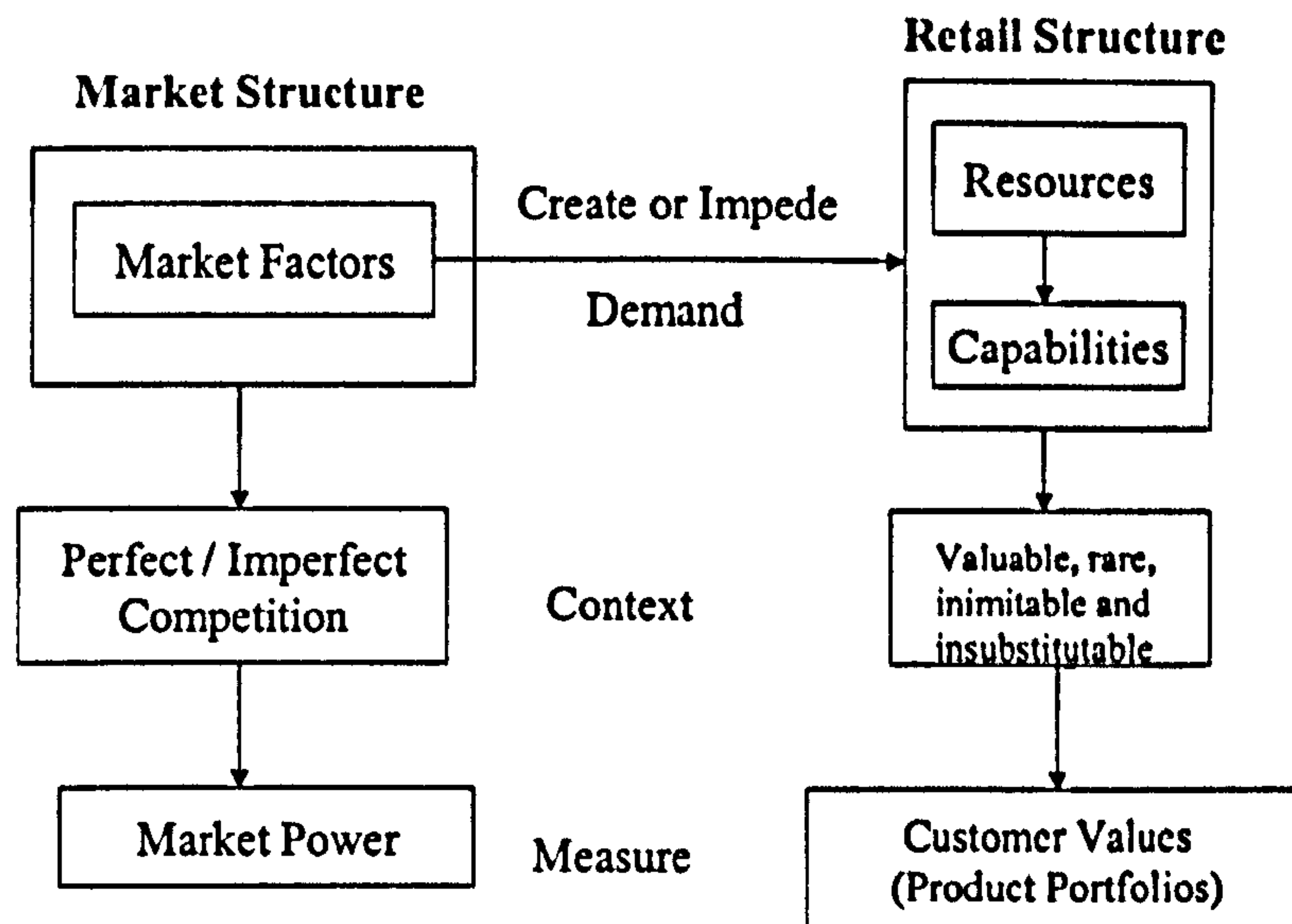


Figure 1.A competition model

3.6.3 Issues

It is the retail channel and not the retail industry that is of interest for this study. The retail channel reflects the retail structure that directly involves the consumers. Consumers adapt their shopping habits to signal both time needs and mobility (Albaum and Hawkins 1983; East *et al.*, 1994). Retail structure is defined as the manner in which firms engage in the trade of a commodity (Bucklin, 1972). The construct depicts the composition of retail stores by size, mix and the distribution of retailers within a geographic area. The retail structure is thus responsible for quality, price and selection of products available to consumers (Miller *et al.*, 1999).

Furthermore retailing involves multiproduct trading in a retail channel compared to single business firms where most of the RBV research has taken place to date. A single retail channel facilitates the flow of several streams of product lines. A mix of product lines with technical similarities may directly correlate to their endowments of resources

and capabilities. This indicates that these endowments of resources and capabilities may be shared between the selected product lines in order to maximise the delivery of customer values. Such value creating strategies may have the potential to exploit synergies that could result from the sharing of resources and capabilities unique to those retailer outfits. The retailers selling white goods also sell brown goods in this retail channel. The selection of white goods for this study may be an indicator as to whether it is possible for retailers to enjoy the benefits of multiple economies of scale.

3.6.4 Independent variable: Key resources:

The review of the retail channel for white goods suggested the key physical resource in the retail channel could be the outlets (OU). Outlets being a key tangible resource were well supported in the telephone interviews and also in the MMC (1995) survey of small retailers in which the effects of large outlets/retail parks were ranked as the highest factor worsening competition in this retail channel. Value maximisation takes the shape of delivering customer values from product portfolios that maximise returns and/or increase market shares for the retailer.

To exploit the full potential of outlets i.e. value maximisation, it is necessary to ensure delivery of customer values through product portfolios that maximise returns per outlet and/or increase in market shares for the retailers. Capacity utilisation is closely related to scale and is both a cost and value driver (Stabell and Fjeldstat, 1998). Value determination is exogenous to RBV and the focus on heterogeneity of beliefs about the value of outlets by Alvarez & Busenitz (2001) suggest value maximisation is internal to the firm.

Miller *et al.* (1999), suggest that regardless of whether scale or saturation is examined the size of the competitive effects is greater when store types are adjacent in the

degree of end use consistency of product line, and unidirectional from the lowest to the highest consistency. In order to capture the maximum effect of competition and its relative competitive advantages, especially the economies of scale, market power and barriers to entry (Dobson and Waterson, 1996), the volumes passing through the outlets were considered instead of store sizes and or store mixes. This is a mature retail channel and growth in sales are expected to be around 1 to 2 % and any changes to market share was expected to be at the expense of competition.

Scale based barriers to imitation and entry is likely to be powerful in markets for specialised products. Scale economies can prevent smaller retailers already in the market from growing larger as the demand for products in this mature channel is fairly constant and can only probably support larger retailers already in the market. Moreover as markets are formed locally, larger retailers could force scale-based barriers to imitation and entry through a substantial geographical spread of outlets. On the other hand it was stated earlier that r-specialists are small organisations favouring first mover advantages than efficiencies.

Retailer differentiation from good locations can increase potential sales and a slight difference in location can have significant impact on market shares and profitability (Ghosh and McLafferty, 1987). Retailer preferences on respective instore services, merchandise mix, quality of goods, and methods of doing business is based not only on the size of the market but also on the location of outlets. The agglomeration of dissimilar types of retailers for example in retail parks could promote multipurpose shopping (Gosh, 1986). Consumers maximise utility by locating an ideal bundle of goods for themselves for example purchasing kitchen units from one retailer and domestic appliances from another both located in the same retail-park. Carroll's (1985) resource partitioning model

on the other hand proposes that intra-type competition between larger generalist results in positive effects on specialists.

White goods are in the mature state and modifications are infrequent and are usually cosmetic. The markets are also moderately dynamic. The minimum efficient scale in the retail channel is assumed to be large relative to market demand and it is expected that larger firms with experience would exploit their advantage of greater efficiency. A small number of established retailers i.e. *Dixons*, *Comet*, and the electricity companies hold substantial slices of the market shares and once secured it becomes an impediment to imitations. Furthermore concentration levels in the retail channel for white goods implies that the number of firms that possess a bundle of valuable outlets is less than the number of firms needed to generate perfect competition dynamics (Hirshleifer, 1980). Outlets therefore become rare resources.

The sign expected is positive (+).

H 1: Competitive Advantage is positively associated with Outlets (OU).

3.6.5 Independent variables: Competitive behaviour variables

In this retail channel it was noted the market leaders arrived later i.e. k-generalists entered later to exploit their advantages of greater efficiency. Dobson and Waterson (1996) observe that some retailers viewed by consumers as imperfect substitutes and incumbency advantages arise through location, experiences and reputation. Age is used as an independent variable to capture advantages of reputation and experiences.

Several past studies use the measures of age (AG) and size as proxies for resource availability (Carney and Gedajlovic, 1991; Lafontaine, 1992) and are used to bring in the concept of life cycle. Resources tend to grow as a firm matures and to this extent the isolating mechanisms such as the early mover advantages are also considered here.

Furthermore the inclusion of age as an independent variable is an ideal starting point to consider the origins of competitive advantage. Stinchcombe (2000) suggests firm performance heterogeneity may arise from the degree to which firms resources and/or capabilities match the competitive environment. The condition attached to this suggestion is that on introduction resources are randomly distributed and the strategy selection and the investments to pursue the chosen strategies are made under uncertain environmental conditions. This means only some strategies together with some resource bundles will be relevant to a chosen market position. In other words the overall bundles of resources and capabilities acquired and gathered by a firm from introduction may be more profitable if it matches the needs of another competitive environment.

The sign expected be (+) to bring in the effects of growth in outlets over time.

H 2: Competitive Advantage is positively associated with Age (AG).

Retailers create markets locally and/or nationally and markets with the greatest dispersion of incomes are assumed to have the greatest variation in opportunity cost of time (Winter, 1993). The author also states that the role of retailers is to compete on price and services which reduce the time it takes to purchase a good and the mix of instruments offered is based on tastes of consumers on the product margins and also inter-retailer margins.

Generation of rent is dependent on volume of sales, prices charged and the mix of products made available to the consumer. Product choices and availability to customer can vary depending on the competitive strategies a firm employs for example cost focus, product differentiation, market focus (Porter, 1980). There was a choice of testing either cost focus (price and volume), differentiation (specialisation) or both. It is the differentiation strategy (mix) that is tested here.

The reason for selecting specialisation was based on the statistics produced in the MMC report (MMC Vol.2 pp.68). Statistics on the MMC sample of 14-retailer sample revealed specialisation in excess of 61%. The data was gathered from 14 retailers, which comprised mostly the top players of this retail sector. The retail channel is experiencing several market leading models instead of the usual single model domination in each product tier (Best selling models - MMC 1997, Vol. 2, pp.68).

The examination of white goods from a product line consistency approach is consistent with previous research (Miller *et al.*, 1999; Ingene and Brown, 1987). White goods are classified as home-laundry, cookers, dishwashers, microwave ovens and refrigeration products. There are numerous brands/models and a three tier of price-quality continuum in this retail channel and direct competition is assumed to remain within each tier (Hirshman, 1978). The large retailers compete on all three levels and the small retailers on the middle to low price/quality tiers and listings are expected to reflect these strategies. The industry analysis chapter revealed that the margins on the bottom tier is low and the middle to upper tiers attractive. Small retailers listed mainly for the lower and middle tiers whereas the large retailer listings included products for all three tiers.

The composition of the product portfolios may be made from one brand or several brands. For example, if the listing included a portfolio that comprised of two different models of washing machines, one model of tumble dryer and one model of cooker of the *Hotpoint* brand then the total number of brands listed would equal to four in total. Similarly the same portfolio could be made up of several brands for example *Zanuzi*, *Hoover* and *Indesit* and the total listed would also be four. The key to success is the delivery of customer values from product portfolios that maximise returns and/or market shares for the shareholder.

The measurement is based on number of brands listed (B) and the expected sign be (+).

H 3: Competitive Advantage is positively associated with Number of Brands listed (B).

3.6.6 Independent variable: Inter-organisational capability

Recent economic analysis of exclusivity arrangements has revealed that such practices can increase efficiency Marvel (1982); Steuer (1983); Ornstein (1989). It is also stated that exclusivity reduces intra-brand competition when economies of scope are low in retailing (Dobson and Waterson, 1996a). Exclusivity brings in the social element of inter firm relationships (Oliver, 1997). These are contractual arrangements between firms facilitating access to products.

MMC data depict that about 16-20% of total sales of white goods in this retail channel is based on exclusivity deals, and they include own brand labels also. *REC's Electra* for example, has significant market shares in some domestic appliances. Some of the leading players in this retail channel not only use their brand names but also offer products licensed to them. Nevertheless, a fairly large proportion of sales under own brand names is manufactured under retailer instructions. The power to facilitate such arrangements may be dependent on retail branding and the capacity it generates.

Exclusive dealing may also be an entry barrier into retailing and arises when at least one manufacturer has low marginal costs of production. The entry deterrence model of Comanor and French (1985) indicate that the foreclosing manufacturer purchases the retailing barrier to entry and converts it into a manufacturing barrier to entry. By contrast Mathewson and Winter (1987), point out that the retailing barrier allows the manufacturer to exercise its low cost advantages to exclude other manufacturers. Exclusivity in the

form of own brand labels or licences ensures inimitability for the key resource i.e. outlets. The large volumes of product availability for outlets facilitates continuous movements of desired products from the supplier. These arrangements are necessary for retailer organisations intending to exploit the market by obtaining product portfolios that maximise returns and/or increases market shares for its shareholders. Product portfolios offered may vary from one local market to another. Failure to establish such relationships can result in inferior product portfolios that are less efficient and/or effective. Hence the performance of outlet is directly linked to arrangements for product portfolio performance and a positive sign is expected.

H 4: Competitive Advantage is positively associated with Exclusivity (EX).

3.6.7 Independent variable: Organisational capabilities

In this retail channel, retailers appear to rely on free or extended warranties, next day deliveries, after sales services and in-store services to entice customers. As stated earlier, retailers compete on a three-tier price and quality continuum and the above offers are correlated to these tiers. In this survey, next day delivery competitive advantage will be explored at the expense of others as funding details relating to warranties is not accessible and after sale services are mainly provided by manufacturers.

It was stated earlier that small retailers in this retail channel replenished stock from the suppliers as and when it was needed and were offering next day deliveries. The larger retailers however, had warehousing facilities and controlled their own distribution systems. Time advantages are to be captured using the variable order to delivery (OTD) and is measured in days. This is the time taken, to accomplish exchange. It includes several activities within the product channel (Stash, 1972) and is driven by teams of resources (Grant, 1991). The functions of the product channel comprise of the following:

inventory management; material handling; communication and order processing; and transportation. The workings of the four functions collectively indicate how well the flow for exchange is accomplished. Time measures promised for example, the days taken will reflect strategic fit i.e. organisational uniqueness of getting the entire system of activities 'right'. Furthermore to successfully imitate a firm with activities driven by strategic fit, a rival has to align their entire system of activities (Besanko *et al.*, 2000).

A negative sign is expected here, as consumers would prefer to receive their expensive bulky appliances sooner than later.

H 5: Competitive Advantage is negatively associated with Order to delivery (OTD).

3.6.8 Independent variables: Strategic adaptation capabilities

Value maximisation is one of the prime targets for management and sustaining values requires that the condition of heterogeneity to be preserved. In order to achieve this status firms must set *ex ante* limits to competition in order to counter competitive forces which limit competition for those rents (Peteraf, 1993). To this extent scale based competition facilitated by organisational/inter-organisational capabilities were considered above. However Peteraf (1993) also argues that prior to a firm establishing a superior resource position there must be limited competition for that position. This means that there must be *ex ante* limits to competition and the cost of implementing strategies via other resources should not erode away the anticipated returns.

The strategic adaptation capabilities are activities within the composition of working capital that could set *ex ante limits* to future competition for the firm. These activities could relate to the product and/or non-product activities of the firm. Strategic adaptation capabilities are tools available to manipulate existing resources configurations

or to build new resource configurations that satisfy the capacity requirements of the key resource(s).

The localised competition model by Baum and Singh (1994) suggests lower failure rates among firms are present when there is less of an overlap of resource bases. The potential for adverse competition among firms is a function of the overlap of resource bases such as customer demand, labour and financial needs.

The strategic adaptation capabilities within the elements of working capital tested here are stock-turns, average credit days, third party credit card usage and promotion. The main purpose of these tests in this study is to test the ability of the retailers to set *ex ante* limits to future competition from value-creating strategies that are triggered by product/non-product activities of the firm. These strategies are also expected to satisfy the conditions inimitability and insubstitutability for the key resource i.e. outlets.

Dobson and Waterson (1996) state that the pressure for manufacturers to gain access to the retail level is becoming increasingly intense as manufacturers step up product proliferations. Furthermore the MMC findings on the best selling models were found to be inconclusive indicating that products could be close substitutes.

If a firm is to have competitive advantage, it has to implement a value creating strategy not simultaneously implemented by current or potential competitors. In this case these strategies could relate to activities that relate to products on offer. For example, a retailer delivering customer values from efficient product portfolios that maximise returns and/or increase market shares may have stock turn ratios far higher than those delivering customer values from inefficient product portfolios. High turnovers are an indication of access to popular brands and good management whilst low turnover could indicate over

investment in stock. The standards for stock turn are individual to the firm and may be set in connection with the scale of operations.

On the other hand Besanko *et al.* (2000) state that products could be close substitutes if they can meet three conditions of similar performance, similar occasion and same geographic market. In this situation stock turns would relate to retail channel averages and there will not be any competitive advantages as retailers in this retail channel are able to access other brands. Substitutes however have the potential to reduce potential rents. If this is the case this process gives the retailer the opportunity to look at non-product activities that complements *ex ante* limits to future competition.

A positive sign is expected here.

H 6: Competitive Advantage is positively associated with Stock-turns (ST).

Dobson and Waterson (1996) state that for example in food retailing, the number of products sold through supermarkets has doubled since the 1980s and the number of new products launched has increased at an even faster rate as manufacturers step up the extent of product proliferation. In such circumstances, manufacturers have little alternative but to offer substantial discounts to large retailers. In the industry analysis chapter it was found that suppliers preferred bulk buying and that the retailers were offered bulk buying discounts and also extended credit.

The variable average days of credit (CD) offered and used in this survey is a measure of creditworthiness. This form of short term funding is a product activity and the size of the funding would relate to scale of operations. Credit terms are negotiable and is enhanced through social and professional relationships between firms. Extended credit terms based on bulk buying is of particular interest here, as the outlet (resource) performance is associated with exclusivity. Exclusivity on the other hand ensures stock

availability at preferential terms, which in turn ensures continuous flows for the supplier. The sign for this variable is expected to be positive.

H 7: Competitive Advantage is positively associated with Creditworthiness (CD).

Ghemawat (1986) argues that inimitable positions derive from size advantages, preferred access to resources and/or restrictions on competitor options. Retail branding is an important feature for multiproduct retailers and has the potential to restrict competitor options. Retail branding has the double benefit of differentiating services from both the buying and selling sides and is a means of countervailing the selling power of brand suppliers (Dobson & Waterson, 1996). Moreover the communication effects on a brands positioning could be affected by the desirability of the brand relative to other competitive offerings and also the brands price sensitivity (Boulding and Lee, 1994).

The work carried out by Chatterjee and Wernerfelt (1991) on the links between resources and the type of diversification considered three classes of resources: physical resources, intangible resources and financial resources. Excess resources in physical, knowledge, and external finance are associated with related diversification.

It was stated in the industry analysis chapter that some retailers had set up subsidiaries to manage consumer credit and warranty insurance whilst a few took on the risks by relying on their healthy balance sheets. Furthermore consumer credit, and/or warranty insurance are related diversification strategies funded by external/internal finance. These are value creating strategies could be aimed at enhancing retail branding and for countervailing the selling power of supplier brands.

Credit card usage was selected as a variable to capture the effects of consumer credit. In other words if the volume of payments going through credit cards is known by deduction the remaining balances indicate the extent of retailer funding of credit. White

goods are expensive and not all consumers readily pay cash as purchasing takes place once in three or four years usually and is never planned. The third party credit card usage facilitates instant purchases so does the provision of a firms consumer credit service. Several retailers issue their own credit cards which allows settlement on a monthly basis and thereby offering an interest bearing facility, whilst the facility to accept third party credit cards/debit cards is also available.

It was noted in the industry analysis chapter that some retailers arrange consumer credit through an outside finance house and are rewarded by commission payments. The larger retailers take on the associated risks and administration through internal facilities/subsidiaries set up for these purposes. In the industry analysis chapter it was also revealed that the market shares of the retailers mentioned above accounted for more than 55% of the total market indicating that the financial power was in the hands of a privileged few in this retail channel.

It is expected that payment by third party credit cards to be small and consumer credit funding to be high in this retail channel and a negative sign is expected here.

H 8: Competitive Advantage is negatively associated with Third party credit cards (CC).

Winter (1993) states the mix of instruments i.e. price and services offered to customers were dependent on the collective maximisation of profits to the retailers. Consumers are heterogeneous in their opportunity cost of time and will forego the opportunity of some added values in preference to others.

Boulding and Lee (1994) suggest that for firms pricing above the industry average the current advertising and sales force activities increase future differentiation and decrease future price competition, whereas current promotional activities decrease future

differentiation and increase future price competition. Non-product activities may also be aimed at reducing customer search costs.

Price Competition appears to be very fierce in this retail channel resulting in price deflation over the last few years. The ability to reduce prices is dependent on whether the retailer can fund such price cuts themselves. There is also an arrangement whereby suppliers provide margin support when prices are initially negotiated. This enables retailer margins to be protected when price-cutting becomes necessary. If support was not forthcoming negative returns may result with some retailers exiting the retail channel. However the retailers may leave the brand positioning strategies to the suppliers and may prefer to implement strategies that enhances their own reputation.

Sales on promotional credit (P) - (interest free credit/ buy now pay later schemes) is an indicator for reputation gathered through not only healthy balance sheets, consumer credit facilities and also the unique marketing skills of the firm. This process facilitates the keeping and capturing of both the old and new customers. Suppliers are also known to participate in this scheme in order to promote sales of their brands and they compensate the retailer by offering extended credit. It was noted from the MMC report that purchases through promotion schemes may trigger more purchases in the future. Promotion schemes have the potential to increase revenues through interest payments from existing debtors i.e. postponed payments. The facilitation of consumer credit service requires funding as well as the application of unique marketing skills of the firm. To this extent buy now and pay later schemes are expected to entice customers into the retail stores.

H 9: Competitive Advantage is positively associated with promotional credit (P).

Summary

General Model (Proposal)

$$CA = f (\text{KRS} + \text{CB} + \text{IOR} + \text{OC} + \text{SAC})$$

Key Resources
Competitive Behaviour
Inter Organisational Capability
Organisational Capability
Strategic Adaptive Capability

C A P A B I L I T I E S

Retail Channel Model (Variables)

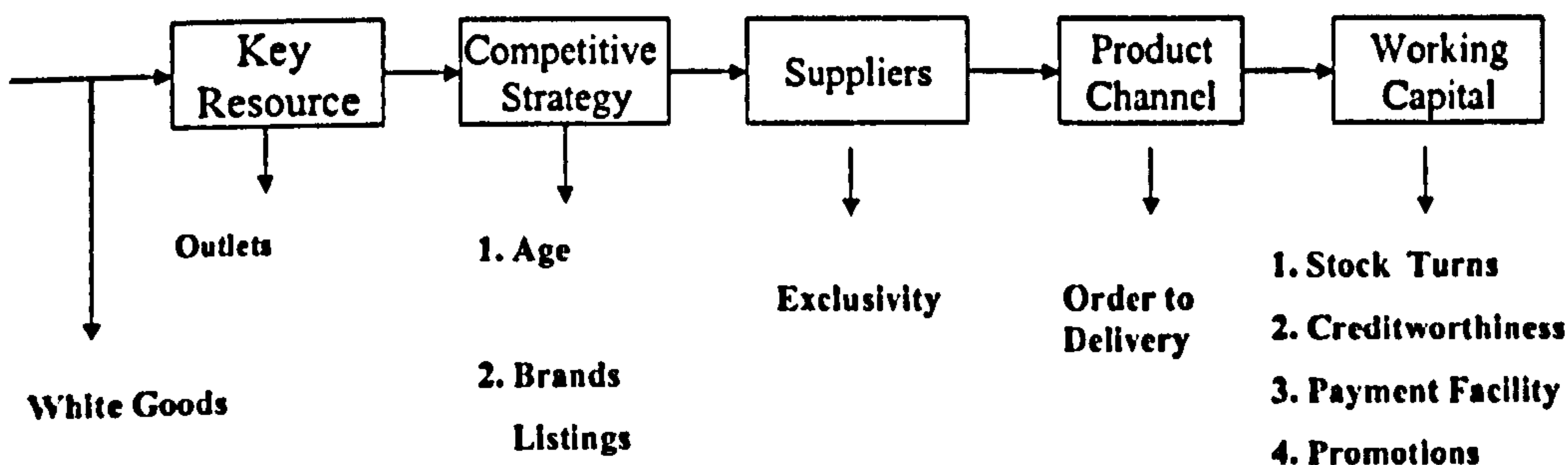


Figure 2. RBV Flow Model

3.7 Conclusion

Capabilities whether tacit / transparent, key /ordinary are activities created by resources employed by the firm in the search for rents and are summarised in figure 2 above. In other words the performance of a firm is the measure of the performance of the total resources (assets) of the firm and competitive advantage being the offshoot of superior performances. However, the total assets that are made up of both strategic and working tangible and intangible assets may be shared between multi-product lines. Working capital is a requirement for developing strategic resources and continuity over time and is supplemented by organisational and inter-organisational capabilities. Working capital elements contain strategic adaptation capabilities, which could set ex-ante limits to future competition and are a necessary source for competitive advantage. These capabilities may relate to the product and/or non-product activities of the firm. Firm performance is the result of competitive interactions, where the conduct of firms is

determined by the structure of the industry, and the structure is measured by the properties of the industry. Industry conditions have impacts on both behaviour and performance of firms. In this study the firm's performance is considered in terms of its structure and conduct in the retail channel.

The hypotheses for this study are based on Penrose's, (1959) observation that a firm may achieve above normal rents not because it has better resources, but rather the firm's distinctive competence involves making better use of its resources. Dierickx and Cool (1989) also argue that it is the firm's unique capability to deploy or transform its resources that result in sustainable competitive advantage. Hence, in the retail channel for white goods the efficient and effective deployment of outlets is dependent on the firm's ability to deliver customer values from product portfolios that maximise returns and/or market shares for its shareholders. The type of value creating strategies that emerge relate to the sources of market power prevalent in the retail channel for white goods in the UK.

Chapter 4

Methodology

4.1 Introduction

This chapter explains methodological and empirical considerations and details the process of testing competitive advantage in the retail channel for white goods. It describes how the research was conducted and implemented together with some justifications of the approach used in this study. The chapter also describes how data and measures of data were selected establishing links with industry analysis, literature review, and also the results and analysis chapters. The analytical approach used here is concerned with producing explanations of empirical connections as a relationship of observable to observable using a resource based theory that is already established.

4.2 Scope

Quantitative research is depicted as linked to the positivist tradition of the natural sciences, with an objectivist view of the world and science and a view that reality is a concrete structure which can be defined and understood as a sum of its parts. The present study is an attempt to test the associations of competitive advantage with key resources and capabilities using the RBV pertaining to the retail channel for white goods. Whilst there are numerous theories relating to the determination of competitive advantages, the RBV was preferred as it explains much more clearly, at this stage, the selection and the conditions under which firm resources can be a source of sustainable competitive advantage. Barney (1991) suggests for firm resources to be heterogeneous and immobile

they must possess four attributes namely: they must be valuable, rare, imperfectly imitable and without substitutes.

In MMC report (MMC 1997, Volume 11, pp.109) it was revealed that the level of retailer concentration in the UK and France was at its highest, whilst somewhat less in the USA and lowest in Italy, and Japan. The prevalence of small retailers in parts of Europe is believed to be a reason for their markets to be less competitive than in the UK. International comparisons on prices indicated that the prices in the UK are generally lower than elsewhere in the European Union. The study of competition in the retail channel for white goods in the UK is expected to provide vital clues as to why the current retail structure in the UK could be efficient and effective relative to those in other countries.

White goods retailing includes a relatively small number of national, regional and non-electrical multiples, regional electric companies, and a large number of small retailers. The high levels of retailer concentration in this retail channel may suggest that some retailers may be benefiting from economies of scale/scope. The total market for domestic appliances was about £2.797 billion pounds of which the market for white goods equalled £2.223 billion pounds (Key Note Ltd, 1997). Furthermore in comparison to other retailing industries especially grocery retailing, the market values may nevertheless be small, but its contribution to the gross national product in the UK is thought to be important.

Retailers operate in local markets and the size of the markets largely depends on the type of product offered and is a significant factor in retailing (Dobson and Waterson, 1996). This study focuses on a single trade line - White goods, and is consistent with previous research (Ingene and Brown, 1987; Ingene and Lusch, 1981 and Miller *et al.* 1999). The reason for choosing white goods for this survey is based on the explanation

of the vagueness of the existing definitions of retailer types i.e. inter-type and intra-type competition. Miller *et al* (1999) state that researchers have yet to reach consensus on various definitions of retail competition. They argue that the lack precise taxonomy on retailer types leads to nonexclusive categorisation of competitive interaction among stores. Their proposed typologies of retail competition i.e. inter-type, intra-type or inter-category are thus based on product line consistency and are defined in the literature review chapter. Moreover the product line consistency approach is suitable for white goods (experience products) as it includes competition from limited line specialists, broad line specialists and general merchandisers.

Competition in the retail channel for white goods follow a three tier price-quality continuum (Hirschman, 1978). For this survey limited line specialists are small retailers competing on low to middle price/quality product ranges, whilst broad line specialists are national/ regional multiples, and electricity companies competing on all three tiers. General merchandisers included mail order companies and other multiples for example *Iceland* competing on selected tiers.

The objective of this study is suited to a quantitative research approach as it plans to employ a cross - sectional surveying technique designed to explain phenomena through the discovery and testing of general causal principles as information for longitudinal survey was not available. A surveying technique was preferred for economy of survey design, a rapid turnaround in data collection, and the ability to identify attributes of a population from a small group of individuals (Fowler, 1988; Babbie, 1990). This study uses the information provided by the MMC as a platform to understand the workings of the retail channel for white goods. The reason for this approach is driven by whether the sampling design for this population is single stage or multistage (Creswell, 1994).

The MMC had gathered their evidence initially from fact finding visits to large suppliers, 11 multiple retailers, small retailers, warehouse clubs and other connected parties. These visits were followed by postal questionnaires and later the provisional findings were sent to larger suppliers and larger multiple retailers and a summary of the provisional findings was sent to smaller suppliers and smaller retailers. Interview surveys were also conducted on 625 small retailers of white and brown electrical goods and followed up by further visits to survey appropriate respondents (MMC 1997, Volume 11, pp. 2). The interview survey was designed on questions based on a yes/no response. Clearly the above approach is well beyond the capabilities of a single researcher with resource constraints and an opportunity presents itself to progress from a multistage procedure to a single stage sampling procedure armed with reliable information. This study, however, is in pursuit of associations of key resources and capabilities with competitive advantages in the retail channel for white goods and is deemed to be an extension of the work already carried out by the MMC.

Table 2.1 displayed a summarised version of the structure of the retail channel for white goods. However, the sampling frame for this study took into consideration the detailed structure of the retail channel as depicted in the MMC report (MMC 1997, Volume 11, pp.31). All national multiples (2 firms) and all the regional electricity companies (4 firms) were included in the sample as these 6 firms between them had a market share in excess of 50%. Furthermore, other named retailers i.e. all departmental stores (4 firms), mail order companies (5 firms), non electrical multiples (3 firms) were also included in the sample. The overall market shares of all firms mentioned above accounted for more than 70% of the total market shares. The remaining 30% market shares comprised regional multiples and small retailers from which a random sample was taken. A directory supplied by *Combined Independent Holdings (CIH)* was used for these

purposes. For admission to membership with *CIH*, small retailers had to produce three years of audited accounts and have a turnover of over £75,000 of electrical goods retailing. This criterion was acceptable to this study, as the sampling frame was to include a broad spectrum of firms within the retail channel for white goods where variations in the profiles of resources and capabilities were expected to result in competitive advantages for the firm.

In order to find the sources of competitive advantages in the retail channel for white goods the work carried out by the MMC was explored in the first instance. The only exploratory work undertaken in the retail channel for white goods was in 1995 when the MMC investigated the supply of domestic electrical goods in the UK. This information was found to be invaluable as the nature of the investigations were found to be extensive and facilitated a single stage design that would thrust out some key resources and capabilities relevant to this study.

Moreover telephone interviews were also conducted on white goods retailers randomly to find out what they thought the competitive advantages were in this retail channel. The information obtained from the telephone interviews indicated that the retail channel had not undergone major changes and sources of competitive advantages were similar to those extracted from the ratings of the factors worsening competition for small retailers (MMC 1997, Q9 pp.311). The ratings in the order of importance were as follows:

- a) effects of large outlets/retail parks,
- b) intensified competition for e.g. availability of leading models, free/extended warranties, next day deliveries, credit facilities, sales promotions, after sales services, reputation, exclusivity and experiences were predominant.
- c) price competition from other retailers especially in the low price - quality tier,

d) aggressive competition by regional electricity companies for e.g. buy now pay later schemes.

Several sales executives of a leading manufacturer were also consulted to verify whether the above situation had changed since 1995. The executives informed that there were no significant changes in this retail channel since 1995 and therefore the use of the above factors was relevant for this survey.

This study examines competitive advantages from a RBV perspective. Competitive advantage was measured by the market status of firms in the retail channel for white goods. The preferred option was to use profitability but the gathering of sensitive data was found to be impractical, especially as the white goods industry had undergone recent investigations from the regulators. However the use of market share as a proxy for competitive advantage was found to be useful as it provided the necessary links between competitive advantage, resources and capabilities.

Although many previous studies may have used profitability for measuring competitive advantages (Buzzell and Gale, 1987; Porter, 1985; Buzzell, Gale and Sultan, 1975; Besanko *et al.*, 2000) recent studies have nevertheless demonstrated the use of other measures of competitive advantages. The component selected for a pharmaceutical firm to measure sustained competitive advantages in the pharmaceutical industry was through therapeutic differentiation (Yeoh and Roth, 1999). This measure was based on the total number of NCEs to total number of NCEs introduced. NCE was defined as a new molecular compound not previously tested in humans. Cockburn *et al.* (2000) in testing the origins of competitive advantages used the rates of adoption of science driven discoveries. Furthermore Dobson and Waterson (1996) argue that the increasing number of UK markets for retailing may be better approximated by oligopoly, with the development of large retail chains possessing substantial market share and earning

substantial profits. Therefore it is assumed that the main value creating strategy for this retail channel is the delivery of customer values from product portfolios that maximise returns and/or increase market shares for the shareholder. A firm is said to have competitive advantage when it is implementing a value creating strategy not simultaneously implemented by current or potential competitors (Barney, 1991).

In retailing market factors determine retail structures (Hirschman 1978; Ingene 1983; Ingene & Brown 1987). The market structure entails the demographic characteristics of the customers and environmental factors in a trade area (Bucklin, 1972). The retail structure is defined as the manner in which firms engage in the trade of a commodity and its construction includes retail stores by size, mix, and the distribution of retailers within a geographic area (Bucklin, 1972). Retail structures associate consumers. Consumers adapt their shopping habits to signal both time needs and mobility (Albaum and Hawkins 1983; East *et al.*, 1994). Retail structures are thus responsible for quality, price and selection of products available to consumers (Miller *et al.*, 1999). Hence the efficiency and the effectiveness of these structures is a manifestation on the retailer utilisation of key resources and capabilities that lead to competitive advantages in this retail channel.

4.3 Data collection

The survey instrument chosen was a self-designed questionnaire. The format of some of the questions planned for this survey was similar to those already presented by the MMC in their survey. The questionnaire contained 10 items of operational data relating to key resources and capabilities and the reasons for choosing this data is explained in section 4.4. The measures for data selected contained a mix of actual to

ordinal scales. Only one measure was based on a dummy variable and the details are displayed in Table 4.2.

A preliminary version of this survey instrument was pre-tested for content, and face validity on 6 executives of a leading manufacturing organisation. These executives have had daily dealings in the supply of domestic appliances to the retail channel. This was found to be significant as the relationship between supplier and buyer was imperative for good performances in the channel. A few changes were made to the original version in order to keep the questionnaire simple and user friendly (Appendix F). A cover letter assuring confidentiality was attached to the questionnaire, which highlighted the requirement for the understanding of retail competition in the retail channel for white goods. The cover letter also included an arrangement for a prize draw containing a magnum of champagne to facilitate response.

The data was collected from single respondents namely a purchasing manager for large firms or the managing director of a smaller firm. The names of purchasing managers of large firms were obtained by telephone and were addressed accordingly. A response rate of 20-25% was anticipated for this retail channel and this gave 285 respondents 4 weeks to complete and return their questionnaires. The survey was carried out by despatching questionnaires by mail with a fixed closing date - 21st of July 2000.

The number of retailers who responded amounted to 67 for a response rate of approximately 24%. Four questionnaires were returned of which 2 contained insufficient data and two were refusals. One famous departmental store refused to participate whilst the two market leaders declined to send in their questionnaires. However it was decided that the two national multiples and one other regional electricity company were to be included in the sample as they would complete representations of all retail outfits. For these questionnaires sales executives of a leading manufacturing organisation of white

goods provided surrogate values. These sales executives had frequent dealings with the relative organisations.

Furthermore 35 out of the 70 questionnaires were incomplete with missing data that was mainly related to the promotion variable. The telephone interviews helped resolve this problem for 22 questionnaires. For the remaining 13 questionnaires the *SPSS* programme was instructed to insert mean values for the missing data on promotions. Table 4.1 shows the distribution of responding firms and their respective turnover per annum. The turnover totals of responding firms represent more than 40% of the total market for white goods. At the point of survey the total market for white goods was valued at £2083 billion (GfK, July 2000) and the descriptive statistics are displayed in Table 5.1.

In this sample 59 out of the 70 firms registered less than 5 outlets and were considered as small retailers. The MMC had defined small retailers as those with 4 outlets or less (MMC 1997, Vol.11. pp.35). Moreover an opportunity presents itself to conduct two surveys i.e. the main survey included all retailers in the sample and the one for small retailers included retailers holding less than 5 outlets. This approach was thought to be important as competitive advantages may be appropriate to local markets and furthermore the understanding of the survival patterns of small retailers was also important for this study. The mean values of variables used in this survey are displayed in Table 5.14.

In this study the arrival of a logical deduction is to hypothesise that firm heterogeneity measured by firm performance in the market place, was the result of varying firm resources and capabilities. Information on the options available for competition in the industry analysis chapter indicates the use of operational measures as appropriate for testing competitive advantages in this retail channel, bearing in mind the importance of firm efficiencies and effectiveness as contributors to firm heterogeneity.

The advantage of using operational measures was convenient, as those connected with the retail channel were aware of these measures. Furthermore, some very important financial/performance data relating to the retail channel for white goods was not readily available through secondary sources.

Table 4.1 Turnover of Responding Firms in the Sample

Turnover	No. of Firms (responded)
>£250 million	1
>£150 million	1
>£100 million	3
>£50 million	3
>£10 million	2
>£5 million	4
>£1 million	19
>£0.5 million	24
>£0.1 million	9
<£0.1 million	4

Source: Compiled by author

4.4 Data and Measures

4.4.1 Measuring competitive advantage

In this study the means of testing competitive advantage is based on Barney (1991) definition. A firm engaging in activities that increase its efficiency or effectiveness in ways that competing firms are not, regardless of whether other firms are in a particular firms industry. It was stated earlier that operational data was used for measurement purposes and the concepts used are explained in the following paragraphs.

Efficiency refers to the ratio of outputs to inputs. The type of efficiency considered here is economic efficiency, where the aim is to minimise the input costs for a given level of output (Wilson & Chua, 1994).

Effectiveness refers to the extent of goal achievement i.e. the state or outcome that materialises after the implementations of organisational plans (goals) (Wilson & Chua, 1994).

Organisational goals emphasises the purpose of an organisation is to satisfy the need of shareholders in the long run. Organisation control ensures its activities attain the purpose (Wilson & Chua, 1994).

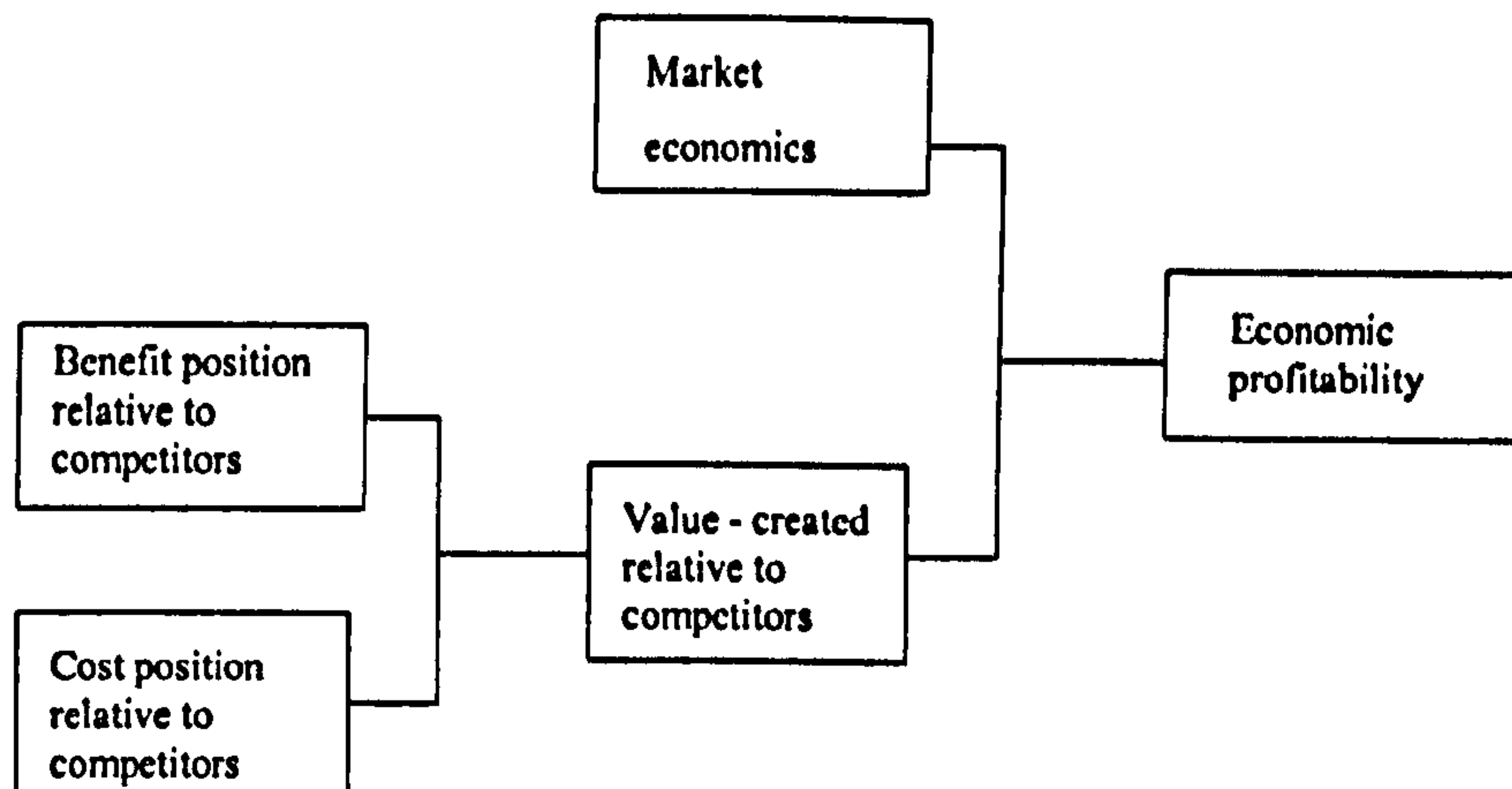
In the retail channel for white goods the key activity is the delivery of customer values, from a formulation of product portfolios that maximise returns and/or increase market shares (organisational goals) for the shareholders. The measurement of the performance (efficiency) of product portfolios, individual to the organisation will determine whether a given level of input (resources and capabilities) achieves a desired level of output for example sales revenues. Portfolios of products for outlets thus become value-creating strategies for the firm and are individual to the firm. The firms competitive advantage is hence created by the implementation of value creating strategies that are based on market imperfections and not simultaneously implemented by current or potential competitors.

Besanko *et al.* (2000) on the other hand define competitive advantage as when a firm or business unit within a multi - business firm earns a higher rate of economic profit than the average rate of economic profit of other firms competing within the same market. They base their definition of competitive advantage on a economically sensible definition of the firm's market. They state that except for perfectly competitive markets a group of firms are said to be in the same market if one firms production, pricing, and marketing decisions materially affect the prices the other firms in that group can charge. Similar assumptions are made in this study for firms competing in the retail channel for white goods but the key resources are the unit of analysis instead of the firm. It is the ability of

the key resource to manipulate other resources and capabilities that result in the delivery of customer values from product portfolios that maximise rents and / or increase market shares for the shareholders is the objective of this study.

Besanko *et al.* (2000) further develop, a framework to explain why some firms achieve competitive advantage and others do not. Figure 3 below explains that a firm's profitability within a particular market depends jointly on the economics of its market for example five - force analysis and its success in creating more value relative to its competition. Therefore the amount of value the firm creates in comparison to competitors must also depend on its cost and benefit position relative to its competitors. Value maximisation is individual to the firm and is dependent on the effective interaction of its profiles of resources and capabilities. Whilst it was stated above that the delivery of customer values in the retail channel for white goods concerns product portfolios that maximise returns and /or increases market shares for the shareholder. Furthermore it was also stated earlier that if the domestic appliance market for white goods were imperfect then there could be market power for the retailers in this channel. The sources of market power were barriers to entry, economies of scale/scope, national/ local market power and retailer differentiation of services. The above sources thus explain the context in which both firm resources and capabilities can contribute to competitive advantage.

Framework for competitive advantage



Source : Besanko et al. (2000)

Figure3 Framework for competitive advantage

Undoubtedly profitability appears to be the best measure of competitive advantage. For this survey profitability measure was considered but gathering data from the firms in the retail channel for white goods was found to be impractical due its sensitive nature. This is because the white goods industry had undergone MMC investigations on the supply of white goods and retailers connected with this industry were also investigated. Moreover the product line consistency approach used in this survey made it difficult to obtain financial data for white goods from secondary sources as retailers competing in the retail channel for white goods were also trading in brown goods.

The use of profitability as a measure for competitive advantage may not be as straightforward as it appears to be. For example firms in the retail channel for white goods could be using different costing techniques. In marginal costing variable costs are charged to cost units and the fixed costs are written off in full each period. On the other

hand absorption costing incorporates both fixed and variable costs into production and consequently into stock valuation. Stocks under marginal costs are valued at cost only. The different methods of stock valuation from the two approaches produce different profit figures when stocks exist at the beginning or the end of a period. The retailers in the UK may use similar stock valuation techniques. Furthermore the retailer profile of resources and capabilities could be shared between white and brown goods and the sharing extends the difficulties of apportioning fixed costs between white and brown goods. Additionally the measure of competitive advantage looks at economic profit whilst retailer profit and loss accounts depict accounting profits and the determination of opportunity costs in the retail channel for white goods could be an arduous task. Moreover the accounting profits are after charging depreciation for the assets in use and may be subject to a straight-line method or an accelerated method of depreciation. The above profitability problems further extends to corporation tax issues where capital allowances differ for different classes of assets and the amounts that can be offset against a form of tax liability is also subject to variation. Therefore the question of which profitability measure to use in the analysis generate more questions than answers.

The use of market share as a proxy for competitive advantage in this study may also have serious limitations when used in the wrong context. Increases in market shares do not automatically increase profits, as the economic mechanism underlying the correlation is more likely to be inconspicuous. A competitor may attempt to buy market share by cutting its price or raising advertising levels and may find it that it is unable to achieve the same level of profits as the market leader. The under performance may be due to the quality of products offered to consumers or because it is unable to catch up to the initial advantage of the leader. The key point being a strategy designed to exploit the positive relationship between market share and profitability has no hope of succeeding

unless the linkages between market share and profitability is imperfectly understood by the participants of an industry (Besanko *et al.*, 2000). Moreover market shares in an industry must by definition add up to 100 percent and it is impossible for firms in an industry to increase market shares simultaneously. Furthermore the total market for white goods was measurable and at the point of survey the value was registered at £2083 billion (Gfk, July 2000). This valuation facilitates future comparison of the current system in play.

The scrutiny began with what matters, more for profitability: The market or the firm? Besanko *et al.* (2000) contend that if there are great variations of profit across industries and a little variation in profit among firms within the industry the market effect becomes more important than the position effect and vice versa. Nevertheless the market and positioning can explain profitability. On the other hand research by McGahan and Porter, (1997) suggests that the industry accounts for 18 percent of the variation in profit across firms while competitive position accounts for about 32 percent of the variation in profits. This study is about the variation of profits within a retail channel and not the industry and it is assumed that the resources and capabilities competing within the retail channel are owned or controlled by firm's produce the same effects.

Hence the next best alternative for measuring economic profit was to measure the competitive position effects that trigger economic profitability. For these purposes in this survey a sample that contained all retailers and another which contained the small retailers were analysed to extricate value creating strategies that related to competitive strategies of cost focus, differentiation of product and market focus. The independent variable relating to product differentiation was tested for competitive advantages in the retail channel bearing in mind if this variable was insignificant then it would be by deduction the cost focus strategy that was creating values for customers in the national

market. The small retailer survey facilitated the testing of competitive advantage in local markets. In other words the competition in the national and local markets was expected to demonstrate creation of values from superior/inferior retailer resources and capability profiles. Moreover the interaction and the simultaneous diffusion of multiple effects of the key resource (outlets) with competitive behaviour, inter organisational/organisational, strategic adaptive variables is expected to explain how competitive advantage can be sustained.

Many economists argue that the vast majority of business firms large or small operate under the market structure of oligopoly (Sio, 1991). Oligopolies display the following characteristics:

1. A small number of firms.
2. Products may be homogenous or differentiated.
3. Interdependence

Furthermore economists have used a market share model to explain pricing behaviour of firms in an oligopoly. The market share model explains that prices tend to be similar for products sold by oligopolists even when competing firms costs are different no matter what their market shares or cost structures might be (Sio, 1991). The variables tested were prices, costs and revenues against outputs. Moreover Porter (1976) also implies that retail markets are likely to be highly concentrated oligopolies. In the retail channel for white goods oligopolists may prevail in national markets and also in local markets too. Market structure is a major determinant of retail structure as it consists of environmental variables and socio-economic variables that either create or impede retailer demand (Miller *et al.*, 1999). Market share of a firm is thus a reflection of the efficiencies and effectiveness of a firm's value creating strategies.

The research on the exploitation of economies of scale/scope by some firms has suggested positive correlation between firm's market share and profitability. Relative market share has been used in strategy as a performance measure and has been emphasised as the main variable relating a firm to its competitors. Market share position is widely believed to be a determinant of profitability and is positively correlated with profitability (Buzzell *et al.*, 1975). It has also been used as a proxy for some firm specific competitive advantage(s), resulting from learning effects and other specific assets (Hansen and Wernerfelt, 1989; Karnani, 1984).

Many studies verify the link between economies of scale and market structure suggesting that some underlying factor such economies of scale determines market structure (Besanko., 2000). The research on the measure of the magnitude of scale economics depict that the industries in which the minimum efficient scale of production is large relative to the size of the market tend to be more concentrated than industries with minimal scale economics (Besanko., 2000). For the retail trade as a whole government statistics show that concentration in most sectors increased substantially throughout the 1980s. Concentration of firms in the retail sectors are, thought to be characterised by strong economies of scale and the movements of gross margins may follow the direction of concentration levels (Dobson and Waterson, 1996). Concentration levels in this retail channel for white goods demonstrate that the national multiples and the electricity companies between them hold more than 50% of the market shares. Table 2.1 also depicts substantial use of outlets by a handful of retailers in this retail channel and this could facilitate economies of scale/scope, barriers to entry, market power and retailer differentiation of services.

Therefore the context in which market shares were used as a proxy for competitive advantage are linked to market economics and the value creating ability of a

firm's profile of resources and capabilities. The relative market share explains the extent of goal achievement (effectiveness) in retail competition for white goods and is measured as a ratio of the firm's sales revenues against the total sales revenues in the total market. Sales values are the output of product portfolios and is measured in this survey on an ordinal scale (1-11) in the first instance and then converted into market share. At the point of survey the total market for white goods was £2083 billion (GfK, July 2000).

However if the context was not defined the market share used as a proxy for competitive advantage could be subject to other interpretations. A firm could have high or low market shares. The gap between the leader and the follower will vary from industry to industry and the distribution of shares among firms will relate to stability requirements of that industry. However Porter (1985) suggests that industry stability is critically dependent on industry structure and whether competitors are good or bad. The most important structural variable determining the ideal pattern of shares are the degree of differentiation or switching costs and a number of structural characteristics could influence a leader's optimal share. He further suggests that high optimal market share for leaders could imply that there are significant economies of scale facilitated by a steeper learning curve. There may be few industry segments and a preference to a single source of supply. Moreover multi brand distribution channels is non-existent and competitors share value activities with related business units. There are high entry barriers and the small competitor share positions are an effective base from which to attack a leader.

On the other hand if the leader had lower optimal share this could indicate that there are unattractive segments, a few economies of scale and a modest learning curve. The channels have bargaining power and desire multiple suppliers. The followers are necessary credible entry deterrents and the industry has a history of antitrust problems or is vulnerable to them.

4.4.2 Independent variable: Key resources:

There are nine independent variables and are defined in Table 4.2 below.

Table 4.2 Variable Definition

Variable	Definition
<i>Dependent variable</i> Market share (MS)	% Market share (sales/total market value*100)
<i>Independent variables</i> Outlets (OU)	Ordinal Scale of 1-5 1= <2 outlets 2= >2 outlets 3= <5 outlets 4= >10 outlets 5= >50 outlets
Age (AG)	Actual years
Number of brands listed(B)	Actual number
Exclusivity (EX)	Dummy variable 0= no 1= yes
Order to delivery (OTD)	Actual days
Promotions (PR)	Proportion of annual sales on promotions
3rd party credit card usage (CC)	Proportion of annual sales on 3rd party credit cards
Supplier Credit (CC)	Actual days
Stockturn (ST)	Actual number
Sales	Ordinal Scale of 1-11 1= >£250 million 2= >£150 million 3= >£100 million 4= >£50 million 5= >£25 million 6= >£10 million 7= >£5million 8= >£1 million 9= >£500,000 10 = >£100,000 11= < £100,000

Source: Compiled by author

4.5 Model construction

In the MMC investigations of 1995 the retail channel for white goods was claimed to be efficient and effective compared to other retail industries in Europe. In order to capture the efficiency and effectiveness of this retail channel's retail structure, it is proposed that the key resources and capabilities were associated with competitive advantage.

The research questions for this study were therefore:

- a) Is competitive advantage in the retail channel for white goods associated to key resources and capabilities?
- b) Does the ability of the key resource(s) to manipulate other resources and capabilities result in product portfolios that maximise returns and/or increase market shares for its shareholders?

In the retail channel for white goods the main value creating strategy for the retailer is the delivery of customer values that maximise returns and/or increase market shares for its shareholders. In order to create a value creating strategy a firm has to possess resources and capabilities (causes) that its competitors lack. Not all resources are sources of competitive advantages. Resources (outlets) are factor stocks that are employed through a firm's capabilities (competitive behaviour, organisational, inter-organisational, strategic adaptive) which are firm specific and it is a basis by which productivity of resources can be enhanced. Capabilities are the means by which the resources are deployed to effect a desired end (Amit and Schoemaker, 1993). Therefore, resources represent what can be done by the firm and capabilities represent what must be done to compete efficiently and effectively in satisfying customer needs in a competitive environment (Priem and Butler, 2001). The desired end being competitive advantages

(effect) is thus produced from implementing value creating strategies not simultaneously implemented by current or potential competitors (Barney, 1991).

Therefore the model for the retail channel for white goods was formulated as,

$$CA = f(R, C) \text{ or } CA = f(\text{Resources, Capabilities})$$

The dependent variable CA is the measure of the extent of value maximisation in delivering customer values from product portfolios that maximise returns and/or increases market shares for its shareholders at a point in time. The explanatory variables are chosen to illustrate the various competing hypotheses where R is the measure of key resources at a point in time and C being the key capabilities at that point in time.

The data captured included different perspectives on the sources of competitive advantages pertaining in the retail channel of white goods. The choices about the requirements of a suitable functional form or about which explanatory variables to use were similar to those suggested by (Cockburn *et al.*, 2000). In their analysis of the origins of competitive advantages they suggest that an empirical model that considered the dynamics of diffusion was required. The reasoning behind this suggestion is that the effects needed to work simultaneously in order to assess the relative salience of 'initial conditions' and environmental heterogeneity in driving patterns of adoption of a performance enhancing practice. Likewise the choosing of a model based on multiple regression analysis in this study recognises competitive advantages at a point in time.

There are several ways of analysing the data using multiple regression analysis. The simplest model will involve regression of competitive advantage on independent variables individually i.e. key resources, competitive behaviour, inter-organisational resources, organisational capabilities and strategic adaptive capabilities making up a total of 5 equations. Then there are also the permutations and combinations of 2,3,4,5 independent variables. To include all the independent variables together however brings

in all the effects to work simultaneously. The latter method was preferred as linkages between resources and capabilities with competitive advantages were necessary for this study, bearing in mind the diffusion of the conditions required for a resource to be a source of competitive advantage namely value, rarity, in-imitability and in-substitutability (Barney, 1991). Undoubtedly there may be other efficient methods for analysing data but the use of this method in this survey may be interpreted as a type of empirical approach.

The key resources and capabilities can be expanded further to include the types of resources and capabilities used in this study as in Fig 1.

$$CA = f(KRS + CB + IOR + OC + SAC)$$

Where,

CA = competitive advantage

KRS = key resource(s)

CB = key competitive behaviours

IOR = key inter-organisational capabilities

OC = key organisational capabilities

SAC = key strategic adaptive capabilities

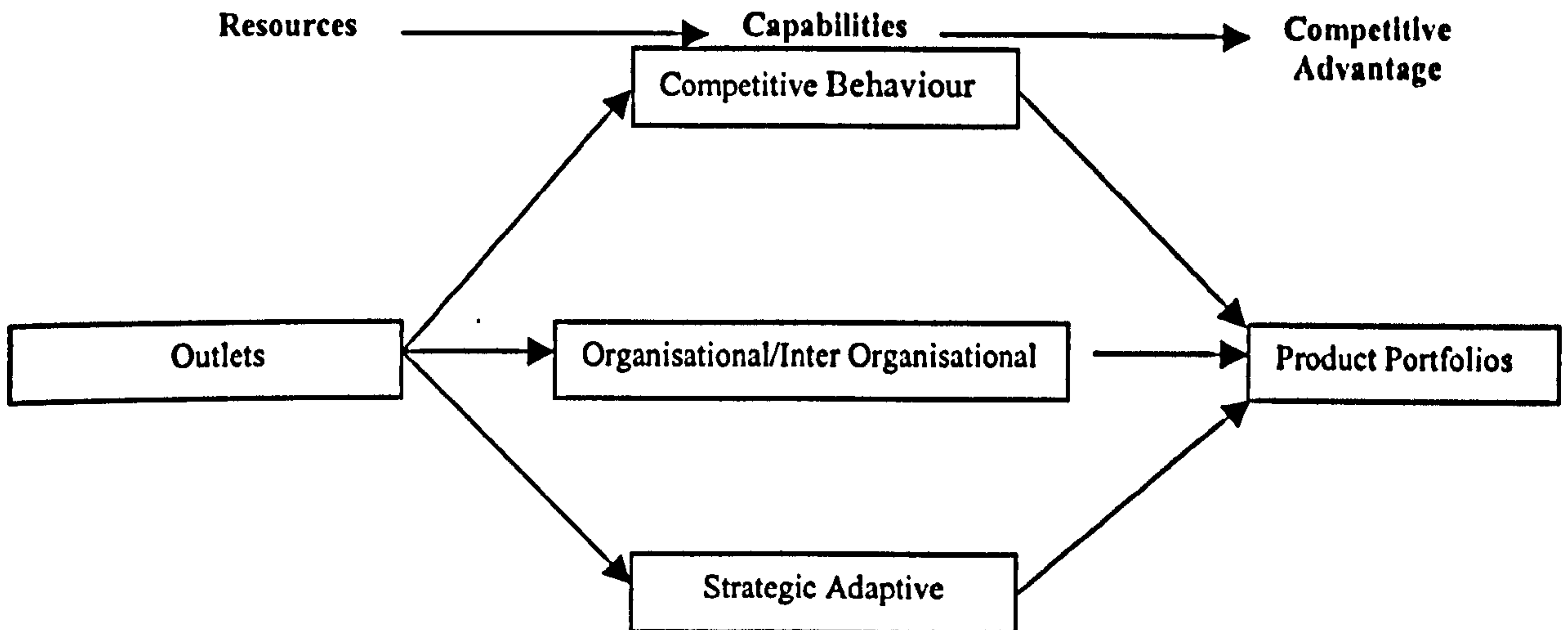


Figure 4. A Resource Based Model

Dobson & Waterson (1996), state retailer power is on the increase and firm heterogeneity is created from barriers to entry, economies of size and scope, national/local market power and retailer differentiation. Additionally, they also state that the influences of small independent establishments have substantially diminished in recent times as the exploitation of economies have led to a few firms controlling a considerable slice of the market. A recent study by Miller *et al.* (1999), however, implies that there are mutually beneficial relationships among different types of retailers rather than an overwhelming competitive advantage for larger stores.

Bearing in mind the differing views, this study modifies and uses the model of retail structure designed by Miller *et al.* (1999), to understand the roles of both the large and small retailers in this retail channel. Their model consisted of 3 components namely personal service levels (quality and quantity), scale (size of stores) and saturation levels (number of stores per 1000 households). In this study scale and saturation levels were combined to include competitive advantages of scale/scope i.e. economies of scale/scope created by the total number of outlets (resources) in use. This takes into consideration the

conditions necessary for a resource to be a source of competitive advantage: namely, value; rarity; inimitability; and in-substitutability.

Customer preferences for stores apart from prices are likely to include, location effects, layout, ambience, product range, sales personnel and pre and post sales services (Dobson and Waterson, 1996). Moreover Winter (1993) suggests that the role of retailer services is to reduce consumers opportunity costs, especially time costs of obtaining the product. Superior capabilities were split to include competitor behaviour, organisational/inter-organisational and strategic adaptive capabilities pertaining to this retail channel. The competitive advantages from retailer differentiation of services (capabilities) replaces personal services and, together with resources outlined above, captures the total competitive advantages in this retail channel.

$$\mathbf{CA = f (Retailer resources, Retailer capabilities)}$$

Furthermore if the extent of the economies of scale were known, then by deduction the remaining advantages must relate to retailer differentiation in services. Therefore the mix of competitive advantages of economies of scale and retailer differentiation of services may serve as a measure of the efficiency and effectiveness of competition in the retail channel for white goods. Hence if competitive advantages were a function of resources and capabilities in the retail channel for white goods this could be modified to include total competitive advantages in the form of retailer differentiation of scale/scope and services respectively.

$$\mathbf{CA = f (Retailer differentiation of scale/scope, Retailer differentiation of services)}$$

The theoretical model suggests that the following equation can be used for the determination of market share (*MS*) which is the proxy for competitive advantage.

$$\mathbf{MS = + OU+EX +B+ AG+EX - OTD + (ST + CD+P- CC)}$$

And the equation that is actually estimated at a point in time (t) is:

$$MS_t = \beta_0 + \beta_1 OU + \beta_2 EX + \beta_3 B + \beta_4 AG - \beta_5 OTD + \beta_6 ST + \beta_7 CD + \beta_8 P - \beta_9 CC + \epsilon$$

Where,

β_0 is a constant and is also a parameter.

β_1 to β_9 are the other respective parameters.

ϵ is a stochastic error term.

Dependent Variable

(MS_t) = Market share (proxy for competitive advantage)

Independent Variables

Retailer resources (Retailer differentiation of scale/scope)

(OU) outlets = Key resource

Retailer capabilities (Retailer differentiation in services)

(EX) exclusivity = Inter-organisational capability

(B) No. Of brands listed, (AG) Age = Competitor behaviour capabilities

(OTD) order to delivery = Organisational capability

(ST) stock-turns, (CD) credit days, (P) promotions, (CC) credit cards are Strategic adaptive capabilities

The analysis for the main survey and the small retailer survey will be conducted separately and the ordinary least square (OLS) method was used for these purposes. In order to facilitate multiple regression analysis both *SPSS* and *LIMDEP* software packages were considered. The *SPSS* software package is a popular package and will be used for the initial output analysis for both the main survey as well as the small retailer survey. An example in the *SPSS 7.5 'Application Guide'* was used as a guideline. Initially all the variables were entered for output analysis. The purpose of following this procedure was

based on the statement that, the moderate violations of parametric assumptions have little or no effect on substantive conclusions in most instances (Cohen, 1969).

However in the second stage of output analysis the descriptive statistics table was referred to and variables that exceed + or- 3 range on both *Skewness* and *Kurtosis* readings were to be transformed using power transformations. The purpose of transforming the variables was to address the potential problems relating to normality, linearity and heteroskedasticity. Moreover it is stated that the heteroskedasticity variables can be remedied through data transformations and that this process will also correct for non-linearity and non-normality also (Hair *et al.*, 1998).

The problem of heteroskedasticity is likely to be more common in cross-sectional data as information is collected at one point in time. In the cross-sectional data gathered for this study the members of the population of different sizes such as small medium and large firms. The variables thus have dissimilar orders of magnitude and the problem facing the researcher is how to detect heteroskedasticity in a specific situation. Unfortunately there are no hard and fast rules to detect heteroskedasticity only a few rules of thumb (Gujarati, 1995). This is because in economic studies there is only one sample and it is almost impossible to know the standard deviation of the whole population. To this extent detecting heteroskedasticity in econometric investigations may be a matter of intuition, educated guesswork, prior empirical experience or sheer speculation (Gujarati, 1995). There are several formal methods suggested to examine heteroskedasticity, however these methods are based on the examination of the (OLS) residuals and a fairly large sample is needed to detect heteroskedasticity. However the *LIMDEP* programme has an inbuilt facility that corrects the issues of heteroskedasticity and the results are produced after correcting for heteroskedasticity. With this in mind it was decided that the

use of *LIMDEP* programme would be most appropriate for the validation of the results for the main survey as well as the small retailer survey.

4.6 Conclusion

A positivist approach employed in this study resulted in the invitation of 285 retailers to participate in a national survey of retailers of white goods. The purpose of this survey was to test whether there were any associations between competitive advantage, resources and capabilities pertaining to this retail channel. The means of testing competitive advantage was based on a firm engaging in activities that increases its efficiency and effectiveness in ways that competing firms are not, regardless of whether those firms are in a particular firms industry (Barney, 1991). Firm performances were measured by the market status of the firm, a proxy for competitive advantage that was to provide the necessary links between competitive advantage, resources and capabilities. The information gathered in the MMC survey of retailers in 1995 was invaluable, as this study is an extension to the work already carried out on competitive advantages in the retail channel for white goods.

The response rate was approximately 25% and the market shares of the responding firms exceeded 40% of the total market for white goods. The sampling frame included 5 strategic groups of retailers and was well represented. In this sample 59 of the 70 firms registered 5 or less outlets and were considered as small retailers. Moreover an opportunity presents itself to conduct two surveys i.e. one for the whole population and one for the small retailers. This approach was thought to be important as competitive advantages may be appropriate to local markets and furthermore the understanding of the survival patterns of small retailers was also important for this study.

The intra-type and intertype competition was tested through product line consistency approach. A preliminary version of the questionnaire was pre-tested on 6

executives of a leading manufacturing organisation. This was found to be significant as the relationship between supplier and buyer was imperative for good performances in the channel. The final questionnaire, after minor adjustments, was mailed to either purchasing directors or managing directors who were considered best able to respond to questions on resources and capabilities of their respective retail organisations and confidentiality was assured.

The questionnaire was designed to include one dependent variable and 9 independent variables. Some of the independent variables were included as non-metric measures but were transformed for analytical purposes. One independent variable was coded as a dummy variable. Other variables were classified as metric and are summarised in Table 4.2. With several independent variables the main objective was to maximise the explanation of the single dependent variable. All the independent variables were not on the same scale and it was important that the relative contribution and direction of each variable was understood in terms of the overall explanation in order to interpret the result of the survey. Most importantly a simple statistical technique was required for the purposes of repeatability and reproducibility. All in all it was decided that the most suitable statistical technique to use in this study was that of multiple regression analysis.

Chapter 5

Results and Analysis

5.1 Introduction

At the firm level, Barney (1991) refers to sustainable competitive advantage as, a firm engaging in activities that increase its efficiency and effectiveness in ways that competing firms are not regardless of whether those firms are in a particular firms industry. The main aims of this study were not only to test but also to demonstrate that competitive advantages were associated with key resources and key capabilities that relate to the retail channel for white goods. To this extent an opportunity presents itself to conduct a separate analysis for the main survey followed by one for the small retailer survey also. The main survey will include all observations and the small retailer survey will include only the observations relating to retailers with less than five outlets.

285 retailers were invited to participate in a national survey of retailers of white goods in the UK. The response rate for questionnaires returned were 25% and represented about 40% of the total market shares of the retail channel for white goods. 59 out of the 70 questionnaires returned contained information relating to small retailers (less than 5 outlets).

In this chapter the data on selected variables will be analysed using multiple regression analysis as it provides the means of objectively assessing the degree and character of associations between the dependent and independent variables. The *SPSS* programme was used to facilitate multiple regression analysis in which an ordinary least

square regression method will be used. The missing values are to be replaced with mean values. The procedure commenced with descriptive statistics of the variables followed by the determination of correlation coefficients in order to optimise explanations. A confirmatory model inclusive of all the independent variables will be used in the first instance to test the effects of the overall model fit before and after any violations for the main survey as well as the small retailer survey. The original results will then be validated using *LIMDEP*.

According to Hair *et al.* (1998) a sample size of 70 could detect reliably levels of relationship (R square) in excess of 22 percent at a significance level of 0.05. The proposed multiple regression analysis model was deemed sufficient to identify not only statistical significance but also relationships that had managerial significance.

5.2 Main Survey

5.2.1 Regression Results

To apply the regression procedure, market share (MS) a proxy for competitive advantage was selected as the dependent variable to be predicted by independent variables representing key resources and key capabilities. The following nine variables were included as independent variables:

OU = outlets,

EX = exclusivity,

B = number of brands listed,

AG = age,

OTD = order to delivery,

ST = stock-turns,

CD = credit days,

P = promotions,

CC = credit card usage.

The equation to be estimated at a point in time t was:

$$MS_t = \beta_0 + \beta_1 OU + \beta_2 EX + \beta_3 B + \beta_4 AG - \beta_5 OTD + \beta_6 ST + \beta_7 CD + \beta_8 P - \beta_9 CC + \epsilon$$

Where,

β_0 is a constant and also a parameter,

β_1 to β_9 are the respective parameters,

ϵ is a stochastic error term.

Table 5.1 and 5.2 provide the descriptive statistics and the correlation matrix for the variables.

Table 5.1 Descriptive Statistics

Main Survey	Mean	Minumum	Maximum	Std Dev.
Sample size = 70				
Dependent Variable				
Market share (%) MS	0.63	0	12	1.92
Independent Variables				
Outlets (ordinal) OU	2.21	1	5	1.34
Age (years) AG	26.74	2	93	19.61
No of Brands Listed B	18.39	3	64	12.49
Excusivity (0,1) EX	0.14	0	1	0.35
Order to delivery (days) OTD	2.99	1	10	2.61
Promotions (%) PR	21.76	1	100	19.87
3rd Party credit card Usage (%) CC	30.84	0	100	21.65
Supplier credit (days) SC	34.5	30	90	12.8
Stockturn (no) ST	6.7	0	20	3.9

This was followed by the regression procedure that selects the independent variables that optimises explanation. Correlation coefficients were then calculated and the results are displayed in Table 5.2. Five out of the nine independent variables were found to be significant ($p < 0.05$), and the coefficients were as follows: Exclusivity 0.587, Outlets 0.567, number of brands listed 0.222, promotions 0.369, credit cards 0.242.

Table 5.2 Correlation Coefficients

Variables	Market Share	Outlets (ordinal)	Age Years	No Of Brands Listed	Exclusivity (0,1)	Order to Delivery (days)	Promotions (%)	1 Party Credit Card Usage %	Supplier Credit (days)	Stock Turn (no)
Dependent	MS	OU	AG	NBL	EX	OTD	PR	CC	SC	ST
MS (%)	1	0.572***	-0.108	0.222*	0.587***	-0.025	0.369***	-0.242*	-0.021	-0.036
Independent Variables										
Key Resource										
OU (ordinal)	0.572***	1								
Competitive behaviour										
AG (years)	-0.108	0.107	1							
B (no)	0.222*	0.269***	0.060	1						
Inter-Organisational										
EX (0,1)	0.587***	0.364***	-0.156	0.208*	1					
Organisational										
OTD (days)	-0.025	-0.060	0.055	-0.108	0.048	1				
Strategic adaptive										
PR (%)	0.369**	0.166	0.053	0.053	0.171	0.116	1			
CC (%)	-0.242*	-0.051	-0.07	-0.071	0.004	0.10	-0.368**	1		
SC (days)	-0.021	-0.095	-0.188	-0.014	0.000	-0.200	-0.097	-0.112	1	
ST(no)	-0.036	0.187	-0.153	-0.0153	0.273	0.016	-0.068	0.144	-0.099	1

*p<0.05

**p<0.01

***p<0.001

At this stage it was assumed that the assumptions of linearity, normality, homoskedasticity, and independence are met for the purposes of regression analysis. With this in mind a confirmatory model was produced with the inclusion of all 9 variables to help judge the potential impacts of multicollinearity on the selection of independent variables and the effects of the overall model fit before and after any violations, if any.

Table 5.3 Model Summary

Model	R	R Square	Adjusted R Sq.	Std. Error Est.
	0.758	0.575	0.512	1.334
A	Predictors: (Constant), OTD,ST,P,AG,B,CD,E,CC,OU			
B	Dependent Variable: MS			

Table 5.3 is the model summary where R-Square is 0.575. This means 58% of the variance, was explained by 3 independent variables namely outlets, exclusivity and promotions. The adjusted R square falls to 51% reflecting the penalties for the inclusion of 9 variables, i.e. more independent variables included, then the greater the adjustment penalty.

Table 5.4 ANOVA Model

		Sum of Square	Df	Mean Square	F	Sig.
1	Regression	146.53	9	16.281	9.004	0.000
	Residual	108.49	60	1.808		
	Total	255.016	69			
A		Predictors: (Constant), OTD, ST, P, AGE, B, CD, E, CC, OU				
B		Dependent Variable: MS				

The model summary (ANOVA) tests the overall significance of the regression equation displaying the significance of F in Table 5.4. F statistic displays 9.004 and is significant.

Regression coefficients provided a means of assessing the importance of individual variables in the prediction model only when variables are expressed on the same scale. In this case they were not and standardised beta coefficients were used instead. The three independent variables listed in the order of importance are (Table 5.5): Exclusivity 0.426, outlets 0.373, – both significant at the 1% level and promotions 0.210 significant at the 5% level. In this model the other variables were found to be insignificant. However, these beta values at this stage could not be taken at face value, as there could be violations to one or more of the regression assumptions.

Table 5.5 Coefficients

Model	Coefficients			
	Predicted	Standardised	t	Sig
Variables	Sign	Beta		
Constant	?		-0.432	0.668
OU	+	0.373	3.759	0.000
AGE	+	-0.106	-1.199	0.235
B	+	0.012	0.133	0.894
EX	+	0.426	4.283	0.000
OTD	-	-0.038	-0.436	0.664
P	+	0.21	2.292	0.025
CC	-	-0.086	-0.957	0.342
SC	+	-0.006	-0.07	0.944
ST	+	-0.100	-1.053	0.296

Dependent Variable: MS

5.2.2 Multicollinearity

Testing for multicollinearity revealed a condition index of 16.538 which is below 30 and explain that there is some relationship between some of the independent variables but they were not large enough to reduce the predictive power of their association with each other.

Table 5.6 Collinearity Diagnostics

Model	Dimension	Eigenvalue	Condition Index
1	1	6.933	1.000
	2	0.882	2.804
	3	0.541	3.579
	4	0.445	3.946
	5	0.343	4.498
	6	0.267	5.097
	7	0.237	5.414
	8	0.188	6.073
	9	1.39E-01	7.061
	10	2.54E-02	16.538

Casewise Diagnostics as per Table 5.7 did identify an outlier. This was the largest retailer in the retail channel and the readings were as follows.

Table 5.7 Casewise Diagnostics

Case Number	Std.Residual	Mar Shr
4	5.412	12.00

a. Dependent Variable: Mar Share

5.2.3 Testing Regression Assumptions

Table 5.8 contains the summary of the residual statistics. The standardized residual depicts that there is at least one prediction greater than 3 standard deviations. However standardised residuals also indicate a mean of 0 and the standard deviation below 1 is indicative of an acceptable model. The studentized residuals too have an acceptable mean and standard deviation.

Table 5.8 Residual Statistics

	Minimum	Maximum	Mean	Std. Dev
Predicted Value	-1.0657	5.0426	0.6321	1.46
Std. Predicted Value	-1.165	3.027	0	1.00
Std.Error Predicted Value	0.2903	0.8464	0.4905	0.13
Adjusted Predicted Value	-1.3976	5.092	0.6531	1.50
Residual	-2.7753	7.2776	-1.04E-15	1.25
Std. Residual	-2.064	5.412	0	0.933
Stud. Residual	-2.319	5.844	-0.007	1.023
Deleted Residual	-3.5023	8.486	-2.09E-02	1.5158
Stud. Deleted Residual	-2.41	8.83	0.034	1.301
Mahal. Distance	2.231	26.354	8.871	5.608
Cook's Distance	0	0.567	0.022	0.072
Centered Leverage Value	0.032	0.382	0.129	0.081
A	Dependent Variable: Mar share			

The maximum leverage value is under 0.5, which means cases are not unduly influential. Cook's distance, which is a single measure of overall fit, records a maximum of 0.567, which is below the rule of thumb figure of 1 and hence is supportive of the previous statement on undue influence (Hair *et al.*, 1998).

The assumptions of normally distributed errors were tested by visually inspecting a histogram (Appendix A). Regression is robust in the face of some deviation from this assumption. There is some evidence of skewness. The normal probability plot was also used to test normally distributed error. Under perfect normality, the plot will be a 45-degree line. In this case observed plots are not on the diagonal but close to it (Appendix B) and appear unsatisfactory indicating possible normality violations.

The scatterplot of studentised deleted residuals vs. standardised predicted values should show that 95% of the residuals fall between -2 and $+2$, and only 1 in 1000 should fall outside $+$ or -3 (Appendix C) as per SPSS Application guide. This model displays more than one residual falling outside the $+$ or -3 band. The points do plot in a constant horizontal band but there was a slight scattering of points, highlighting the tendency of

the model to slightly overestimate the low predicted market share values and underestimate the high values.

In the plot of studentized residual values vs. observed values if 100% of the variance was explained in a linear relationship, the points will form a straight line. There is clearly a trend here. A strong line (Appendix D) can be observed with not much of a cloud and is indicative of the high, adjusted R square of 51%. Overall, from the above analysis it was unclear whether the model should be accepted in its current state.

In order to address the possible violations of regression assumptions the original independent/dependent variable readings were subjected to power transformation. Furthermore it was also decided that the variables with p values less than 0.05 (correlation matrix) were to be included in the equation for regression analysis. Only four variables passed this test and the results are displayed in Table 5.9.

Table 5.9 Correlation Coefficients

Variables	Market
	Share
Dependent	MS
MS (%)	1
Independent Variables	
Key Resource	
OU (ordinal)	0.641***
Inter-Organisational	
EX (0,1)	0.466***
Strategic adaptive	
PR (%)	0.320**
CC (%)	-0.242*

*p<0.05

**p<0.01

***p<0.001

The new model summary only changed very slightly with the adjusted R square moving from 0.51 to 0.536 and the coefficients are displayed in Table 5.10 below.

Table 5.10 Coefficients

Model	Coefficients			
	Predicted	Standardised	t	Sig
Variables	Sign	Beta		
Constant	?		1.174	0.244
OU	+	0.561	6.393	0.000
EX	+	0.233	2.592	0.012
CC	-	-0.176	-2.075	0.042
P	+	0.125	1.427	0.158

Three variables were found to be significant and the order of ranking is as follows:

1. Outlets $p < 0.000$
2. Exclusivity $p < 0.006$
3. Credit card usage $p < 0.039$
4. Promotions $p < 0.144$

The point to note is that the normal P-P plot Appendix E is very much closer to the diagonal (the 45 degree line).

5.3 Small retailer survey

A similar analysis was undertaken with the smaller retailer and Tables 5.11, and 5.12 respectively display their results.

Table 5.11 Small Retailer Model Summary

R Square	Adjusted	Std.Error	F	Sig
	R Square	of the Est		
0.433	0.159	0.1557	6.56	0.003

Four variables were found to be significant with outlets carrying the highest ranking. It is important to note that three of the variables notably age, number of brands listed and order to delivery in Table 5.12 that were insignificant in the main analysis.

Table 5.12 Small Retailer Coefficients

Model		Std.Coeff Beta	t	Sig.
1	(Constant)		7.15	0.000
	Outlets	0.27	2.24	0.029
	Age	0.20	1.71	0.093
	Number of Brands	0.21	1.80	0.078
	Order to delivery	-0.23	-2.01	0.050

Dependent Variable: Market Share

5.4 Validation of results

The validations of the above results were conducted in two stages using the *LIMDEP* software programme. The first stage related to the main survey where all variables were included and in the second stage only observations relating to small retailers with less than 5 outlets were considered. The main reason for using *LIMDEP* was because it had an in-built capability to correct the issues of heteroskedasticity. An ordinary least square regression analysis was carried out and the results demonstrate the model to be significant ($p = 0.000$) and the results are displayed in Table 5.13.

Table 5.13 LIMDEP Model Summary

Description	Main Sample	Smaller Retailer Sample
Sample size	70	59
R Square	0.5506	0.29923
Adjusted R Square	0.4998	0.20305
Prob Value	0.0000	0.00824
Breusch-Pagan chi-squared	16.0723	23.4317

Compiled by Author

The dependent variable (market share) together with all independent variables was entered into the *LIMDEP* software programme. Two variables namely stock turns, and

average credit days were excluded as their correlation coefficients displayed insignificance. In order to achieve a better-adjusted R square reading the market share and promotion variables were transformed before they were entered into the programme. The results corrected for heteroskedasticity are displayed in Table 5.14 for the whole sample.

Table 5.14 LIMDEP Main Survey

Variable	Coefficient	Std Error	t-ratio	Sig	Mean of X
Constant	7.53E-02	0.1835208	0.41	0.6829	
OTD	8.14E-03	1.09E-02	-0.744	0.4599	2.9928571
Age	1.21E-03	1.02E-03	1.187	0.2396	26.742857
Brands	1.88E-03	2.05E-03	0.914	0.3643	18.385714
Promotion	0.2113224	0.1106058	1.911	0.0607	1.4927143
Credit Card	-1.99E-03	1.12E-03	-1.778	0.0803	30.842857
Outlets	0.11354817	1.77E-02	6.4010	0.0000	2.2142857
Exclusivity	0.11352073	7.71E-02	1.473	0.1459	0.1428571

Dependent Variable: Market Share

The results depict significance of three variables namely outlets, promotion and credit card usage respectively but supports exclusivity (dummy variable) at the 85% confidence level. In the *SPSS* results exclusivity was highly significant and promotions were supported at the 84% confidence level.

A similar analysis was carried out for the small retailer sample that had 59 observations and the results corrected for heteroskedasticity are displayed in Table 5.15. Interestingly, apart from outlets, exclusivity, promotions and credit card usage were found to be insignificant in the small retailer analysis. Those variables that were insignificant in the main survey for example order to delivery (OTD), age (AG), number of brands listed (NB), are now significant and there is agreement in both the *SPSS* and *LIMDEP* results despite slight variations in the extent of significance.

Table 5.15 LIMDEP Small Retailer

Variable	Coefficient	Std Error	t-ratio	Sig	Mean of X
Constant	4.59E-01	0.1510066	3.038	0.0037	
OTD	-1.41E-02	8.65E-03	-1.635	0.1082	2.9152542
Age	1.85E-04	9.85E-04	1.878	0.0661	26.389831
Brands	2.81E-03	1.54E-04	1.823	0.0742	17.627119
Promotion	-2.59E-02	8.51E-02	-0.305	0.767	1.4535593
Credit Card	-5.36E-04	8.99E-04	-0.596	0.5539	32.711864
Outlets	4.97E-02	1.66E-02	2.9870	0.0043	1.8813559
Exclusivity	-6.02E-02	8.63E-02	-0.698	0.4885	8.47E-02

Dependent Variable: Market Share

5.5 Variable Analysis

In the following sub sections the reasons for significance /insignificance of the variables in the main survey as well as in the small retailer will be explored. The main purpose of the exploration is twofold. The first would look at the fulfilment of resources as a source of competitive advantage followed by the associations of resources and capabilities with competitive advantage.

5.5.1 Independent variable: Key resources

H 1: Competitive Advantage is positively associated with Outlets (OU).

Outlets were found to be the most significant resource at the 1% level carrying with it the highest beta rating in the main survey, as well as in the smaller retailer survey. This is in agreement with the MMC findings that rated the effects of large outlets/retail parks as the main factor worsening competition for the small retailer (MMC 1997, Q9 pp. 311). However for an outlet to be a source of competitive advantage it must meet the three conditions of value, rarity, and inimitability.

Outlets meet the condition of value from economies of scale/scope, which suggests that the delivery of customer values from product portfolios do increase market shares for the shareholder. It also meets the condition of rarity from the imbalance of

outlet classes constructed for this retail channel and is outlined in Table 2.1. For the smaller retailers rarity emerges from early mover advantages especially the location effects. The requirements for meeting the condition of inimitability is of course dependent on the capability profiles of the firm and is discussed in the following sections.

5.5.2 Independent variables: Competitive behaviour variables

H 2: Competitive Advantage is positively associated with Age (AG).

The reason for using the age variable was to consider benefits of learning curve, early mover advantages and network externalities which are impediments to imitation. This variable was not found to be insignificant in the main survey but was significant in the small retailer survey suggesting that the small retailers entered this product, market space before the entry of the two market leaders into this retail channel. *Dixons* was incorporated in 1937 and *Comet* in 1933 and both firms had experiences of the radio and television businesses initially, before moving into the retail channel for white goods in the early 1980s. The late arrival of the larger and established firms into this retail channel was to exploit new opportunities in the retail channel for white goods by competing on efficiencies on a large scale based on their experiences in related areas. Table 3.2 depicts the age profile of firms included in this survey.

The insignificance of this variable implies that the large retailer investments in resources to match environmental demands at birth could be put to better use if there were other investment opportunities with better returns later. Identification of such opportunities is important and the examples below depict how subsequent investments favoured the entry into the competitive environment of the retail channel for white goods. *Comet* ranked second in the share table in the retail channel for white goods were the pioneers of out of town discount stores and were using aggressive pricing strategies

backed with extensive national advertising to boost their sales then. *Dixons* the market leader on the other-hand grew organically and also through acquisitions and mergers. The common factor here is the move by both firms into white goods business in the early 1980s and their resources and capabilities were better served in reaping the advantages of economies of scale/scope in this retail channel.

In comparison the small retailer survey revealed the age variable to be significant and indicates early mover advantages, location effects and reputation gathered from trading in the white goods channel. Both surveys indicate a good fit of the existing resources to the environment for example the suitability of large number of outlets for economies of scale/scope and early mover advantages for the smaller retailer and is in line with the theory on the origins of competitor behaviour (Stinchcombe, 2000).

H 3: Competitive Advantage is positively associated with Number of Brands listed (B).

Competitive strategy of product differentiation (number of brands listed) was tested in both surveys. The main survey depicted insignificance whereas the small retailer survey indicated significance.

It was stated earlier that retailers compete on the three-tier price/quality continuum and the small retailer competed on the low to middle tiers. The significance of this variable in the small retailer survey suggests that an increase in market shares is directly related to increases in the number of brands listed. This highlights that the delivery of customer values is dependent on holding efficient product portfolios i.e. a combination of products from both tiers that maximise shares for the retailer.

On the other hand the insignificance of this variable in the main survey indicates that the large retailers have the potential to earn higher returns from their product portfolios. For example, if 30 products were listed by both the large and the small

retailers, there would be no differences in listings. However if individual portfolios were considered, the potential returns from the larger retailer portfolio could exceed that of the smaller retailer because the large retailer competes on all three tiers. Furthermore it was stated earlier that products on the high/middle tiers commanded better margins. This also suggests that the large retailers are benefiting from cost advantages from bulk buying as well as better margins from selling efficient portfolios that consists of products from all three tiers.

5.5.3 Independent variable: Inter-organisational capability

H 4: Competitive Advantage is positively associated with Exclusivity (EX).

This variable was found to be significant at the 1% level under *SPSS* and was supported only at the 15% level under *LIMDEP*. This study however is in pursuit of explanations and it was decided to accept these results with a view that the measures for exclusivity could be improved by future research. Nevertheless some support was experienced thus implying the delivery of customer values from product portfolios that maximise returns per outlet and/or increase market shares were important contributors to competitive advantages in this retail channel. Legal restrictions imposed via contracts, is a powerful impediment to imitation. The significance of this variable highlights inter-firm relationships and may be linked to reputation. With exclusivity deals retailers could be securing competitive advantage by having first call on popular supplier products that maximise returns and/or increase market shares for the shareholder. Large suppliers have also recognised this strategic advantage and their participation in exclusivity deals depicts preferences for national coverage through a handful of retailers. In this survey exclusivity deals were common among large retailers. However in the small retailer survey the insignificance of this variable confirms that exclusivity is linked to scale and have to be

backed by sufficient financial power and the small retailers are not suitably equipped to do so. On the other hand, exclusivity dealing with larger suppliers can make way for other suppliers to seek less efficient retailers.

5.5.4 Independent variable: Organisational capabilities

H 5: Competitive Advantage is negatively associated with Order to delivery (OTD).

In the main survey this variable was found to be insignificant, which suggests that for the larger retailer the consumers opportunity cost of getting the product i.e. the opportunity cost of time was not an issue. Instead the larger retailers may be enticing consumers by offering other benefits for example consumer credit, promotions and free/extended warranties.

On the other hand, the significance of this variable in the small retailer survey indicates that quicker deliveries are important to the smaller retailer. The survey results indicate that quicker deliveries could increase the market shares for the small retailer. It also indicates that competitive advantage was created by the deployment of other resources that produced organisational uniqueness. This variable represented four functions: namely, inventory management; material handling management; communications and order processing management and transportation management. Hence competitive advantage was created by efficiencies and/or effectiveness of a collection of activities linked directly or indirectly to each other (strategic fit) and is suited to smaller retailers of this retail channel. Moreover individual strategies relating to the above functions could also create further advantages for small retailer.

5.5.5 Independent variables: Strategic adaptation variables

H 6: Competitive Advantage is positively associated with Stock-turns (ST).

The insignificance of this variable in the main survey as well as in the small retailer survey shows that there is homogeneity among firms and stock turns are consistent with retail channel averages. With so many models available in the market it is not surprising to find several best selling models as per MMC investigations (Best selling models - MMC, 1997 Vol.11, pp.68) in each product/quality tier at any point in time.

The insignificance of this variable in the small retailer survey seems to confirm that the price/quality differences between products are small and that the products could be close substitutes especially in the low to middle price/quality tiers. Furthermore it also indicates that retailer access to products in the above mentioned tiers is relatively easy.

Moreover the insignificance of both the number of brands listed and stock turn variables in the main survey signals that the large retailer product portfolios may be weighted towards the high/medium tiers and better margins

H 7: Competitive Advantage is positively associated with Creditworthiness (CD).

The average days of credit given by suppliers to retailers were however found to be insignificant indicating no direct effects on competitive advantage. This means there is homogeneity among firms and there appears to be credit norms in this retail channel. The purpose of using this strategic adaptation variable was to find out the extent of extended credit as for example, a monopoly supplier may set credit terms in isolation to maximise profits. Bulk purchases not only demand preferential prices but also preferential credit terms, which is a social issue. Furthermore the pricing strategy of the supplier may

include credit as an overall price package. A better measure may be the actual credit days given to retailers obtained from the supplier ledgers.

H 8: Competitive Advantage is negatively associated with Third party credit cards (CC).

Credit card usage was selected as a variable to capture the effects of consumer credit. For example, if the volumes of transactions paid by credit cards were known then the balance of transactions going through retailer outlets by deduction, indicates the extent of retailer funding of credit. It has already been mentioned that white goods are expensive, and not all customers readily pay cash for their purchases and that the link between credit cards and outlets was to facilitate instant purchases.

The credit card usage measure was found to be significant in the main survey suggesting that if the use of third party credit cards were increased then the market shares would decrease. This means that there will be less demand for products. In other words if credit card usage were to decrease market shares could increase suggesting that the demand for consumer credit could facilitate increases in retailer market shares. Furthermore based on volumes passing through larger retailer outlets it may be necessary to retain sufficient financial power to fund consumer credits. Therefore it appears that a payment facility could limit competition for rents and could also set tangible *ex ante* limits to future competition (Peteraf, 1993).

The insignificance of this variable in the smaller retailer survey seems to suggest that non-product activities for example the provision of consumer credit appears to be unimportant to the small retailer. This suggests that there may be other non-product activities that are relevant to small retailer scale of operations.

H 9: Competitive Advantage is positively associated with promotional credit (P).

This is another non-product activity that was found to be significant in the main survey and insignificant in the small retailer survey. As mentioned above promotions are best applied when there are larger volumes at stake. Furthermore the main survey results suggest that promotional activities are efficient as it helps to restrict competitor options. In this survey payment facilities were the *ex ante* limit to competition and promotional activities set in motion the limits to competition. Promotional activity is a non-product activity that entices customers into the store independent of the selling power of supplier brands.

The insignificance of the variable (promotions) in the smaller retailer survey suggests that marketing skills of the small retailer may be best suited to promoting supplier brands and those that link the benefits of location effects and gathered reputation in local markets.

5.6 Conclusion

The purpose of this study was to test whether competitive advantages in the retail channel for white goods were associated with key resources and key capabilities using the extended resource based theory of a firm and its linking with retailing. In order to investigate firm differences, a model was developed to facilitate not only the inclusion of key variables predicted by the resource based theory of a firm but also variables from a retail organisational perspective. Key resources and key capabilities relating to this retail channel were identified and screened resulting in the selection of 9 independent variables to predict/interpret associations with competitive advantages.

The proposed multiple regression analysis model was to diffuse the effects of all variables simultaneously and was deemed sufficient to identify not only statistical significance but also relationships that had managerial significance. The *SPSS* results in the main survey, suggested 4 independent variables to be important. Outlets ($p=0.000$), exclusivity ($p=0.012$), credit card usage ($p=0.042$) and promotions ($p=0.158$) which explained 53% of the variance that caused firm heterogeneity in the retail channel for white goods. In the smaller retailer survey the model explained over 22% of the variation between firms and had 4 independent variables namely outlets ($p=0.029$), age ($p=0.093$), number of brands listed ($p=0.078$), and order to delivery ($p=0.05$) that were significant.

The above results were validated by using *LIMDEP* software programme that had the facilities to address the issues of heteroskedasticity. The ordinary least square regression results corrected for heteroskedasticity in the main analysis displayed significance for outlets ($p=0.000$), promotions ($p=0.061$), credit card usage ($p=0.0803$) and exclusivity was supported at the 15% level ($p=0.146$).

In the small retailer survey *LIMDEP* results indicated significance on four variables that were similar to the *SPSS* but with different t values. Outlets ($p=0.004$) was the most significant variable followed by age ($p=0.066$), number of brands listed ($p=0.074$) and order to delivery ($p=0.108$) and the comparisons of the results more or less depict agreement between the two programmes and are displayed in Table 5.16, and 5.17 below.

Table 5.16 Comparisons of p Values (Main survey)

Description (Main survey)	SPSS p value	LIMDEP p value
Sample size	70	70
Outlets	0.000	0.000
Exclusivity	0.006	0.146
Credit card usage	0.039	0.080
Promotions	0.144	0.061

Source: Compiled by author

Table 5.17 Comparison of p Values (Small Retailers)

Description (Small retailer survey)	SPSS p value	LIMDEP p value
Sample size	50	50
Outlets	0.029	0.004
Age	0.093	0.066
Brands	0.078	0.074
Order to delivery	0.050	0.108

Source: Compiled by author

In summary 5 out of the 9 hypotheses were supported and are listed below.

H1: Competitive advantage is positively associated with outlets (OU).

H 2: Competitive Advantage is positively associated with Age (AG).

H 3: Competitive Advantage is positively associated with Number of Brands listed (B).

H5: Competitive advantage is negatively associated with order to delivery (OTD).

H 8: Competitive Advantage is negatively associated with Third party credit cards (CC).

The two software packages used for analysis displayed varying results for exclusivity (the dummy variable) and promotions i.e. exclusivity (SPSS, $p=0.01$, LIMDEP, $p=0.15$) and promotions (SPSS, $p=0.16$, LIMDEP, $p=0.06$). However as this study was in pursuit of explanations it was found that accepting the results at 84% confidence level was deemed sufficient for explanations.

H4: Competitive advantage is positively associated with exclusivity (EX).

H 9: Competitive Advantage is positively associated with promotional credit (P).

The two hypotheses not supported are:

H 6: Competitive Advantage is positively associated with Stock-turns (ST).

H 7: Competitive Advantage is positively associated with Creditworthiness (CD).

Chapter 6

Discussion

6.1 Introduction

This study sets out to demonstrate the association key resources and key capabilities with sustainable competitive advantage from the extended resource-based view. Two surveys were used for the following: one for the whole population and another for the small retailers in the retail channel for white goods in the UK. The diffusion of RBV has had a positive impact on the field of strategy and cognate business activities. Likewise it was appropriate to link RBV with retailing in order to extract the richer descriptions of organisational actions, their antecedents, and their consequences (Gray and Wood, 1991). In this study a firm is said to have competitive advantage when it engages in activities that increases the efficiency and/or effectiveness in ways that competing firms in the retail channel for white goods are not (Barney, 1992). Value, rarity, inimitability and in-substitutability were the basis for determining sustainable competitive advantages in this retail channel.

In addressing the question of whether RBV is tautological (Priem and Butler, 2000), I have assumed that it was not tautological. A similar approach to Eisenhardt and Martin (2000) argument in dynamic capabilities has been undertaken to facilitate the definition of resources in terms of its ability to force other resource manipulations in delivering customer values independent of firm performance as this approach enables empirical falsification.

The previous work carried out by the MMC was invaluable, as it facilitated not only the understanding of the workings of the retail channel but also the identification of

key resources and capabilities for the retail channel for white goods. The white goods industry is a low velocity environment and strategic alterations are very minimal and infrequent. Some of the activities used as examples in the MMC survey still prevail and is also used for demonstration purposes in this study. Furthermore in the MMC survey of small retailers (MMC 1997, Vol.11, Q9. pp.311) approximately five years ago rated the effects of large outlets/retail parks as the highest factor worsening competition in this retail channel. The evidence provided in this study gives support to MMC ratings of the survey of small retailers and directs attention to business concentration in terms of outlet classes rather than firms.

The Chicago approach considers the retailing function as perfectly competitive based on the assumption that in response to small price changes there is easy entry, many competitors and a high degree of buyer seller mobility. Dobson and Waterson (1996) however argue that perfect competition is not evident in most areas of retailing and that retailer market power, at least in a limited form is the likely norm. This study provides some evidence of barriers to entry, economies of scale and scope, national/local market powers, and retailer differentiation of services that validates their argument at least from the perspective of the retail channel for white goods.

The remainder of this chapter includes contributions of this study followed by directions for future research, managerial implications, limitations and the future use of the model designed for this study. The contribution section will notably contain two sections. The first will utilise the main survey in which all retailers are to be included to demonstrate how outlets attained its status as a source of competitive advantage. Furthermore this section will also scrutinise how large retailers go about setting *ex ante* limits to future competition. The preceding section will attempt to explain the survival of small retailers in this retail channel and will use the small retailer survey results for these

purposes. Overall, the performances of both large and small retailer are expected to be driven by firm's resources and is to provide insights into the claim that the retailers of white goods in the UK are efficient compared to their counterparts in Europe.

6.2 Contributions of the study

The research into the workings of the retail channel for white goods was facilitated by a model designed specifically to test firm efficiencies and/or effectiveness of firms based on the RBV and its links with retailing. The purpose behind the specific design was to diffuse all the effects simultaneously in order to demonstrate the linking and ranking of resources and capabilities to competitive advantages at a point in time. The model developed for this study is primarily driven by firms key resources and is set on the following premise: competitor strategies and competitor behaviour depict why firms are where they are today and how they got there. Strategy implementations are steered by both organisational and inter organisational relationships and are path driven. To develop strategic assets firms require working capital. The elements of working capital provide short-term resources for the firm and the product/non-product activities within the composition of working capital i.e. strategic adaptation capabilities have long-term effects that have the potential for setting *ex ante* limits to future competition.

In the main survey that included all retailers the *SPSS* results demonstrate agreements to the proposal that competitive advantages were associated with key resources and capabilities. Three hypotheses were supported: namely, competitive advantage was positively associated with key resources (outlets); positively associated with the inter-organisational capability (exclusivity) and negatively associated to key strategic adaptive capability (credit card usage). Additionally these results were validated by *LIMDEP* that had inbuilt facilities to address the issues relating to hetroskedasticity.

The results displayed significance for outlets, promotion and credit card usage (strategic adaptive capabilities). A comparison of the results is displayed in Table 15.6. Although there were variation as to the extent of significance of exclusivity (*SPSS*, $p=0.01$, *LIMDEP*, $p=0.15$) and promotions (*SPSS*, $p=0.16$, *LIMDEP*, $p=0.06$) it was decided that the above variables were to be included for demonstration purposes. In summary the variables above account for just over 50% of the variances that caused firm heterogeneity in this retail channel.

The small retailer survey results illustrated support for four variables namely outlets, age, number of brands listed and order to delivery and were validated by *LIMDEP*. The linking of resources and capabilities suggest that they are not only associated with competitive advantages but their ranking depict the order of importance as sources of competitive advantages. The significant variables explained about 30% (best estimate) of the variations created by the small retailer key resources and key capabilities.

The significance and insignificance of variables draws attention to the links between industry and the resource as units of analysis. The uses of industry as an unit of analysis points to the structural features of the industry that are external to the firm. Moreover it highlights the number and nature of sellers/buyers, the nature of products, the conditions of entry and exit from the market. However, structural analysis although being a powerful tool for understanding why a particular strategic action is associated with supernormal returns but in itself says nothing about the role of senior management or the process of strategic choice that determines profitability (Cockburn *et al.*, 2000). On the other hand the use of resources as an unit of analysis does not consider the firm just as a contractual entity but directs attention to the necessary strategic investments in internal activities that could generate firm heterogeneity. In this study the combination of industry and resources as units of analysis demonstrates not only the nature and degree of

competition between firms but also the nature and degree of competition between resources (outlet classes).

The results indicated that outlets were the key resources with the highest ranking in the retail channel for white goods. The results from *SPSS* indicated that the outlets alone accounted for approximately 40% of the variations between firms in this retail channel whilst by deduction competitive advantages from retailer differentiation in services was assumed to be about 60%. Perhaps the competitive interactions among retailers facilitated by the use of product line (white goods) consistency approach highlights the presence of economies of scale/scope and suggests imperfect competition in this retail channel. This may be a reason as to why the retail channel for white goods is highly concentrated. The MMC report (MMC 1997, Volume 11, pp.109) revealed international comparisons in concentration in the UK and France as most advanced, whilst somewhat less in the USA and least in Italy, and Japan.

However, in the MMC survey of 1995 it was also noted that the total number of outlets used by multiples were 3378 in number of which 1478 belonged to retailers who specialised in white goods. The outlets belonging to small retailers amounted to 5100 (Table 2.1). Furthermore it was indicated earlier that *Dixons and Comet* the two market leaders entered this retail channel in the early 1980s and since the reorganisation of regional electrical companies in 1995 no major changes had taken place in this. The absence of new entrants of significance indicates some form of barriers to entry and thereby market power for the existing retailers. On the other hand, it could also be argued that despite the advantages of location, size and mix of outlets of larger retailers, the collective power of the smaller retailer outlets may appear to control indirectly the extent of the benefits of economies of scale/scope that is available to the larger retailers.

The MMC survey of the best selling models in each of the reference goods investigated found no conclusive evidence on best selling models (Best selling models-MMC 1997, Vol.11, pp.68). A wide spectrum of retailers were asked to list six best selling models on washing machines, tumble dryers, refrigeration and dishwashers. The replies reflected wide differences in best selling products between these retailers indicating the products may not be perfectly elastic and may be close substitutes. The insignificance of stock turns in the small retailer survey suggests that products may be close substitutes especially in the low to middle price/quality tiers. Additionally the availability of too much information on a variety of models offered might also hinder consumers from making realistic price comparisons in this retail channel. On the other hand the insignificance of number of brands listed suggest that the large retailers have the potential to earn higher margins as their product portfolio's appear to be weighted towards the high to middle price/quality tiers. Porter (1980) suggested that substitutes have the potential to reduce rents but in this retail channel the retailers may be countering this disadvantage by implementing value creating strategies that relate to strategic adaptive capabilities i.e. non product activities such as payment facilities, promotional credit that enhances retail branding.

In the industry analysis chapter it was stated that four major suppliers accounted for more than 50% of the supplies into the retail channel of which about 40% was to the major retailers. Moreover it was also revealed in the earlier chapters that *CIH* and wholesalers in Northern Ireland represented the buying groups for this retail channel. The share of these buying groups was small and suggests that only a handful of retailers were the largest purchasers of white goods supporting the condition of oligopsony. The information above appears to provide some evidence to validate Dobson and Waterson

(1996) view that perfect competition is not evident in most areas of retailing and that retailer market power, at least in a limited form is the likely norm.

It was stated earlier that a firm is said to have competitive advantage when it is implementing a value creating strategy not simultaneously implemented by current or potential competitors. It was also stated earlier that for a resource to be a source of competitive advantage it must meet the conditions of value, rarity, inimitability and in-substitutability. In the following sections it will be demonstrated how outlets became the source of competitive advantage in this retail channel. To this extent the main survey results depicts competitive interactions between all retailer types i.e. intratype, intertype, and intercategory and uses a product consistency to end use approach to discuss how the key resource(s) meets the conditions of value, rarity, inimitability and in-substitutability. The small retailer survey results discusses intratype competition in terms of key resources and capabilities that drive their continued existence in this retail channel.

6.2.1 Value and Rarity

Outlets were ranked as the most important resource in this retail channel at the time of this survey. For outlets to be valuable in this retail channel superior firms had to have the capacity to display and deliver customer values. The effective and efficient capacity utilisation of outlets thus equates to holding and delivering customer values from product portfolio's that increase market shares for the retailer organisation. Miller *et al.* (1999) contended that the size of the competitive effects is greater when store types are adjacent in the degree of end-use consistency of product line, regardless of whether scale or saturation is examined. With this in mind all types of outlets were considered regardless of scale or saturation in order to capture the competitive effects in terms of economies of scale and scope. In this study market shares were used as a proxy for

competitive advantages as market share position was widely believed to be a determinant of profitability (Buzzell *et al.*, 1975). Furthermore market structure is a major determinant of retail structure and is driven by environmental variables and socio-economic variables that either create or impede retailer demand (Miller *et al.*, 1999). The results indicate that increases in market shares are directly associated with increases in outlets alone and accounts for about 40% of the variation between firms. Moreover this variation reinforces incumbency advantages due to economies of scale/scope (Dobson and Waterson, 1996).

In the industry analysis chapter it was revealed that product differentiation was the main competitive strategy in this retail channel. The insignificance of the number of brands listed in the main survey signals a cost focus as an overall competitive strategy in the retail channel for white goods whereas market focus was the competitive strategy in local markets. The insignificance of stock turns in both surveys suggests that the smaller retailer is not deprived of access to a large variety of products in the low/medium price/quality tiers and proposes that the products within these tiers may be close substitutes. The combination of number of brands listed and stock turn variables in the main survey thus hints that the large retailer product portfolios may be weighted towards the high/medium tiers and better margins. Furthermore the insignificance of the number of brands listed also suggests that the larger retailers were using scale-based barriers to imitations and entry. Scale economies is a strategy that could prevent smaller retailers already in the market from growing larger and the demand for popular brands may only support larger retailers already in the market. On the other hand the small retailer survival may depend on a listing of efficient product portfolios that contains inferior and/or superior supplier brands.

The major reorganisations in electrical retailing took place between the years of 1990 and 1995 when the regional electrical companies were privatised and these

companies all had retail operations. This restructuring together with the closures of other retailer shops resulted in the disappearance of more than 836 high street shops (MMC 1997, Vol 11, pp 69) and this was equal to half the number of closures in the previous ten years. Moreover the *Verdict* report of 1996 (MMC 1997, Vol 11, pp.68) indicated that the number of electrical superstores grew from 200 in 1986 to 743 in 1996. The surplus capacity that was available in this retail channel was absorbed by eight of the largest retailers who accounted for about 670 of these superstores indicating that smaller dealers had not generally been able to move out of town. This suggests that in this retail channel the larger retailers appear to have benefited more from economies of scale/scope than the small retailers.

What is also observed is that the two market leaders in the retail channel for white goods were incorporated in the 1930s. Both firms had experiences of the radio and television businesses (brown goods) before diversifying into the white goods in the early 1980s. The diversification into white goods highlights the resource implications attached to extending beyond brown goods and indicates that the resources at origination and the subsequent acquisitions are shared between white and brown goods. This again points to the value creation ability of the resource and the type of market entry that is suitable for its use. Chatterjee and Wernerfelt, (1991) contend that if a resource produces just one product it is unsuitable for diversification and the type of diversification triggered by the resource depends on its specificity within a particular industry. They also argue that the resources that are flexible regarding the end products have the option of either more or less related diversification. They further considered the links of three classes of resources namely: (a) physical resources, (b) intangible resources and (c) financial resources. The physical and intangible resources are inflexible and can be used only to enter closely related markets and financial resources due to its flexibility can be used for any type of

diversification. This means the physical resource can only be used for other purposes if it exceeds the capacity requirements of the current business. Intangible resources such as brand names can however be repeatedly used with different products in the effectiveness of the original operation and they are accrued over time and reside in the human capital of the firm in the form of knowledge and expertise. The financial resources will be discussed under inimitability. Therefore based on the above information it could be argued that both *Dixon* and *Comets* had similar diversification strategies regarding the type of diversification strategy i.e. into related products (white goods) that created more customer values and was supplemented by retail branding. Information on the profiles of these two firms in the industry chapter thus satisfies the conditions necessary for the type of diversification (related diversification) that would result in both *Dixons* and *Comets* successes in their respective markets.

Nevertheless the presence of imperfect competition specifies that the scope for potential returns (value) for some firms that are suitably endowed with key resources are greater than those with limited resources. In this study the indications are that the value of the resource (outlets) for the larger retailers lie mainly in its capacity to deliver customer values, as economies of scale/scope are evident in this retail channel. For outlets to be valuable it must have the capacity to meet the needs of its customers. Capacity means the units outlets available to facilitate the delivery of customer values from a portfolio of white goods that maximise returns and/or market shares for its shareholders. Therefore, if the number of outlets in use reflect the volume of white goods passing through the outlets and if the market growth in white goods is fairly constant then any increases in market share is assumed to be at the expense of competition. Furthermore the concentration levels in the UK retailing sector implies that the number and mix of outlet classes in use is less than that is needed to generate the dynamics of perfect competition (Hirshleifer,

1980). The current mix of outlets present in this retail channel for example retail parks, high street shops, departmental stores, etc makes it unique and is therefore rare.

6.2.2 Inimitability

The survey results also depict that one strategic adaptive capability variable namely credit card usage was negatively associated with competitive advantage and one inter organisational capability of exclusivity was positively associated with competitive advantages. It was suggested earlier that to develop strategic assets firms require working capital. The elements of working capital provide short-term resources and the activities i.e. strategic adaptation capabilities, within the composition of working capital that may generate firm heterogeneity and have the potential for setting *ex ante* limits to future competition. It was also suggested that these activities could relate to product and/or non-product activities of the firm and that they were tools that were available to manipulate existing resources configurations or to build new resource configurations for setting *ex ante* limits to future competition for the firm. Moreover it was already demonstrated that economies of scale/ scope and the number/current mix of outlet classes met the conditions of value and rarity for outlets to be a source of competitive advantage. The importance of credit card usage and exclusivity variables are now considered as impediments to imitation in the following sections in order to demonstrate how outlets maintained their status as a source of competitive advantage in this retail channel.

It was stated earlier that retailer strategies may be pointed at retail branding as multiproduct retailing is on the increase. Retail branding has the double benefit of differentiating services on the selling side as well as from the buying side. The main aim of this strategy was to countervail the selling power of the supplier brands (Dobson and Waterson, 1996). It was also pointed out that an intangible resource for example brand

name could be repeatedly used with different products Chatterjee and Wernerfelt (1991). Credit card usage was selected as a variable to capture the effects of consumer credit. In other words if the volume of payments going through credit cards is known by deduction the remaining balances indicate the extent of retailer funding of credit. White goods are expensive and not all consumers readily pay cash as purchasing takes place once in three or four years usually and is never planned. The link between outlets and credit card usage is the facilitation of instant purchases.

Chatterjee and Wernerfelt (1991) contend that financial resources are very flexible and could be used for any type of diversification. What is observed here is that a specific resource (outlet) is combining with a flexible resource and an intangible resource (retailer brand name) to erect an impediment to imitation. It was also mentioned earlier that the power to arrange exclusivity deals may be attached to retail branding and the capacity it generates. Several retailers issue their own credit cards which allows settlement on a monthly basis and thereby offering an interest bearing facility, whilst the facility to accept third party credit cards/debit cards is also available. In this retail channel it appears that some retailers are implementing a value creating strategy that complements scale based competition and are ensuring the *ex ante* limits to competition is in place facilitated by funding capabilities of the firm that limits competition for those rents (Peteraf, 1993). A payment facility is a value creating strategy that facilitates payments and is independent of the selling power of the supplier brands thus giving the retailer the opportunity to erect a tangible impediment to imitation.

It was noted in the industry analysis chapter that some retailers arrange consumer credit, through an outside finance house and are rewarded by commission payments. The larger retailers take on the associated risks and administration through subsidiaries set up for these purposes for example, *Dixons* the leading retailer uses the services of *Coverplan*

Insurance Services plc, a subsidiary that was principally set up for the provision of warranty insurance and the management of consumer credit. *Comet* the second largest retailer uses *Time Retail Finance Ltd* the wholly owned subsidiary of *Kingsfisher* the parent company for the same purpose. The above subsidiaries may have the facility to raise external finance thus supporting that external financial resources are associated with relative diversification into white goods (Chatterjee and Wernerfelt, (1991). Furthermore it could also be argued that the diversification into risk management is also related diversification as it involves electrical goods. It was also stated earlier that financial resources could be used for any type of diversification. Hence if there were surplus capacities in the subsidiaries set up to manage warranty insurance and consumer credit there is also the potential for further unrelated diversification for supporting other goods. The regional electricity companies and mail order companies were large enough to fund their own credit and insurance arrangements. In the industry analysis chapter it was also revealed that the market shares of the retailers mentioned above accounted for more than 55% of the total market indicating that the financial power was in the hands of a few in this retail channel. These firms had set up subsidiary companies to manage consumer credit on a large scale enhanced by their brand name to complement the anticipated volumes of white goods that would pass through their outlets.

The other retailers especially the small retailers arrange their consumer credit from outside finance houses that takes the responsibility of approving credit, collection of instalments for which the retailer gets commission. *Lombard Tricity Finance Ltd* as it was known in 1995 appeared to be a popular finance house choice among the small retailers (MMC 1997, Vol.11). The reconstruction of the electrical companies, especially *NORWEB* provided *Lombard Tricity Finance Ltd*. the opportunity to acquire its debt portfolio (customer base) and indirectly highlights the involvement of the regional

electrical companies in the set up of consumer credit management for the small retailers. The above are examples of retailer financial power and is ensuring other resources in the form of working capital requirements are adequate to meet the needs of their outlet performances. This illustrates that a suitable payment facility for expensive goods can enhance the sale of white goods and indirectly implies that it is the financial power to fund consumer credit that facilitates increases in the market shares for the retailer in this retail channel. The number of outlets provided the strategy to exploit the economics of scale/scope that was prevalent in this retail channel and together with a suitable payment facility ensured the *ex ante* limit to competition was in place (Peteraf, 1993). The financial power of some retailers established the superior outlet positions by limiting competition for those positions. Moreover the implementation of the strategy relating to payment facility ensured that competition could not easily dissipate rents away as not many retailers had the financial resources to do so in this retail channel. Additionally the payment facility (consumer credit) has also the potential to earn extra revenues by means of interest payments for the firm.

Oliver (1997) also suggested that the sources for competitive advantage should look beyond the resource and market characteristics of firms to government, society, and inter-firm relations as important influences of firm variation. Exclusivity, an intangible capability, that promotes inter-firm relationships and is an intangible impediment to imitation. The main objective of inter firm relationships in the retail channel for white goods was to facilitate delivery of customer values from desired product portfolios that maximises returns and/or increases market shares for shareholders. In this study exclusivity was positively associated to competitive advantage suggesting that the increases in inter firm relationships could increase competitive advantages. Furthermore

exclusivity was positively associated with outlets also suggests that competitive advantages are scale based.

What is observed in this study is that the white goods industry was trading with the retail channel by pursuing strategies that minimise transaction costs needed for economic exchange under the prevailing exchange system here in the UK. Most suppliers in the white goods industry seem to prefer sales of large quantities of white goods to a handful of retailers and their dependence on the retailers is an indication that vertical integration is a restraint. Retailers on the other hand are making available their outlets as the process for exchange. The carrying capacity of the outlets provides the opportunity for displaying differentiated products and also the provision of differentiated retailer services. However the benefits of inter firm relationships in this retail channel seem to tilt towards the larger retailers enhanced by retail branding.

For exclusivity dealings to arise at-least one manufacturer must have low marginal costs of production (Mathewson and Winter, 1987). *GDA Ltd.* was the main manufacturer and a leading supplier of white goods in the UK. However competition for the UK supply of white goods came principally from abroad. Well over half the products were imported. Some of the low cost producers especially from Turkey, Hungary, Slovenia and other suppliers were able to sell goods at marginal costs in order to earn hard currency and their prices were substantially below those in their home markets (MMC 1997, Volume 11, pp.160).

The MMC 1997 ruling has outlawed the exclusivity arrangements in the white goods industry (supplier). Furthermore, since the entry of *Dixons*, *Comet*, and the reorganisation of electricity companies no other strategic retailer of significance had entered this retail channel. Moreover it was demonstrated that in this retail channel economies of scale/scope were present This means that only a handful of retailers are

arranging exclusive dealings by means of contracts to manufacture own labels, licences to sell and bulk buying. Exclusive dealings may thus be an entry deterrent into the retail channel for white goods.

In the MMC survey it was also revealed that the combination of the retailers preoccupation with low prices offers and the substantial over capacity in the UK and Europe had resulted in the average prices falling over the recent years (MMC 1997, Vol.11 pp.166). Furthermore the insignificance of the number of brands listed in the main survey also suggests that cost focus was the main competitive strategy in the retail channel for white goods. This may indicate that the falling average prices had repercussions on the manufacturer margin much more than that of the retailers. According to Sharp (1985) manufacturers may be susceptible to the pressure of one or a few retailers that have significant control over the market. In the retail channel for white goods similar conditions prevail. *General Domestic Appliances Ltd* a leading manufacturer of white goods claimed that the retailers were constantly seeking to protect their margins by requesting additional margin support and were attempting to push costs back on to the manufacturers (MMC 1997, Vol.11 pp.166). *Merloni Domestic Appliances Ltd* another supplier stated that the white goods industries ability to survive in the face of progressive deterioration of price: cost ratios, had an impact on their margins. These examples suggest that the suppliers are influenced to purchase the retailer barrier to entry and this in turn is converted into a supplier barrier to entry (Comanor and French, 1985). Under such circumstances the suppliers are forced to look for continual improvements in quality and distribution that eventually results not only in efficiency gains for the suppliers but can also the reduce of the retailers marginal costs of selling the product. With such cost advantages and other advantages of location, experience and reputation of established large retailers there is differentiation and new entrants into this retail channel may find

entry relatively easy but may find that it is not free (Bresnahan and Reiss, 1991). Moreover the retailing barriers to entry allows some large suppliers to exercise their existing cost advantages to leverage some market power from one market to another whilst protecting larger retailer margins (Whinston, 1987).

The effects of bulk buying policies may constrain the movement of popular products within the retail channel as not all retailers have either the warehousing facilities or the financial power to facilitate stock movements. For example bulk buying of popular models might have some repercussions on price levels taking into consideration the seasonal effects. Perfect competition assumes factors of production are elastic in supply. Large purchases made by the larger retailers need it be on low, middle or upper price/quality tiers, can limit the number of popular stock that is available to smaller retailers as white goods sales are seasonal. As stated earlier, the largest retailer had 19 warehouses in comparison to the second, third, and fourth largest retailers who between them had 8 warehouses altogether. Hence if there were surplus capacity in the supplier industry and if the retailers had the capacity to hold stock, then the financial power to facilitate cheaper bulk purchases could possibly fund the extra holding costs and could also create in-elasticity in supplies of popular stock (Peteraf, 1993). The outlets were demonstrated earlier as valuable and rare and inimitable. Likewise the same is assumed to apply to warehouses as the development of this specific asset is time consuming and expensive. Warehousing complements delivery systems and some larger retailers controlled their delivery systems too. Other retailers either replenished stock at outlets as and when required or arranged with suppliers for direct delivery into consumer homes. Hence it appears that a handful of retailers have set up distribution systems that are hard to imitate.

Moreover it was mentioned earlier that four major retailers accounted for more than 40% (Table 7.7 MMC 1997, Vol.11 pp.31) of sales in the domestic appliance market and four major suppliers in the white goods industry accounted for more than 50% of the total supplies (Table 7.2 MMC Vol.11 pp.12). Suppliers normally prefer bulk purchases to smaller purchases and there are more than 3000 small outlets with limited access to popular stock depicting some form of market power for a few large retailers.

Shaffer (1991) formally found that slotting allowances and retail price maintenance serve a strategic role in dampening downstream competition allowing retail price and profits to rise. The effect of slotting allowances is up-front payment and the indirect benefit of committing the retailer to take up a wholesale price above a manufacturer's marginal cost of production. This process is to induce the retailer to raise their retail prices. Comanor and French (1985) suggest that to secure an exclusive deal the manufacturer/supplier needs to offer a wholesale price low enough to make it more profitable to seal a contract with the retailer. It was stated earlier that in this retail channel the buying groups market share was small and many retailers were buying directly from the suppliers.

In the absence of wholesale /recommended retail prices in this retail channel the individual supplier-retailer contracts become unobservable and the manufacturers/suppliers rely instead on their target market prices. These target market prices are negotiated with the retailers and as a result a transfer price is agreed based on their respective market powers and there are no up-front payments to the retailers. Furthermore with the removal of retailers recommended prices in this retail channel the gap between the suppliers marginal cost and the retailers selling price is bigger than it would otherwise be under the wholesale system. This system gives the powerful retailer the opportunity to select efficient suppliers and to keep the surplus arrived from the

reduction of the transfer price whilst keeping the selling prices unchanged. Moreover 'double marginalisation' as observed by Spengler (1950) is avoided as joint profits are mutually agreed between the retailer and the supplier and is only visible to the participants.

The visibility of joint profits on the other hand also gives the larger retailer the opportunity to scrutinise the supplier product cost structures. Recent retailer attention has been drawn on the manufacturer's warranty provision that is included in their cost structures. The manufacturers usually provide between one to two years of free warranty insurance for their products whilst the retailers offer extended warranties on top of the manufacturers warranties for a price. Some large retailers are now using their buying power to purchase the manufacturers warranty insurance costs and are taking on the risks themselves. The retailer benefits from further reductions in purchase price and also finds an opportunity to reduce the selling prices also. The retailer strategy to reduce selling prices year on year hence, may be directed towards reducing the consumer purchasing cycle for example from an average 4 year to a 2 year purchasing cycle. Consequently such an action also has the effect of increasing yearly sales revenues for the retailer. On the other hand if the retailer takes on the manufacturers warranty insurance there could be more opportunities to generate extra revenues from extended warranties for their subsidiary companies and/or the in-built internal facilities set up for these purposes.

6.2.3 In-substitutability

Peteraf (1993) also argues that prior to a firm establishing a superior resource there must be limited competition for that position. This means there must be *ex ante* limits to competition and the cost of implementing strategies via other resources should not erode away the anticipated returns. Under in-imitability it was illustrated that credit

card usage was an activity within the composition of working capital i.e. strategic adaptive capability and its indirect connection with funding consumer credit was important for setting *ex ante* limits to competition (Peteraf, 1993). The financial power of the larger retailer extracted from the same variable can accomplish a dual role of inimitability and in-substitutability as the barriers to imitation were scale based. However the use of the other strategic adaptive capability namely promotional credit which is a non-product activity is also important. The promotion of buy now pay later schemes have highlighted not only the need for marketing skills but also the exploitation of the marketing economies of scale. The marketing economies of scale thus complement the economies of scale/scope created from efficient product portfolios in this retail channel.

This study provides some support for the association of competitive advantages with promotional credit suggesting that increases in promotional activities would increase market shares. The purpose of sales on promotional credit (P) – (interest free credit/ buy now pay later schemes) is to keep hold of the existing customer base and also to capture new customers. Moreover it was stated earlier that the communication effects on a brands positioning could be affected by the desirability of the brand relative to other competitive offerings and also the brands price sensitivity. The long term effects of both desirability/ price sensitivity affect the firm's ability to earn future profits and that promotional activities decreases differentiation and increases future price competition (Boulding and Lee, 1994).

In the retail channel for white goods the focus of some retailers appears mainly to be on the enhancement of retailer branding and also appears to be separated from promoting the supplier brands. The promotional activities of buy now and pay later schemes seem to complement consumer credit facilities that are already set up and the purpose behind this strategy is to entice the customer into the stores. Moreover the retailer

focus for capturing customers via this non-product activity appears to be based on increasing the desirability element of retail branding in order to decrease the retailer reliance on the selling power of the supplier brands. The survey results suggest that promotional activities when linked to another value creating non-product strategy can increase retailer differentiation.

The *'Which'* magazine survey of standards of service in electrical goods in 1996 found that, despite widely publicised claims of price cuts and special deals, the larger chains not only matched each other on price, but were the most expensive. The independents and smaller chains tended to be cheaper (MMC 1997, Vol.11, pp69). This implies that some larger chains were charging above average prices in this retail channel. Furthermore it was mentioned before that more than 50% of the supplies into this retail channel were imported and that some importing countries supplied below their marginal cost. Additionally this may also suggest that strategies aimed at retail brand enhancement are aimed at weakening the selling power of some popular supplier brands.

It was noted from the MMC report (MMC 1997, Vol.11 pp.70) that promotional credit took the form of interest free credit or of deferred payments. The *Business Book 1996* has suggested that 30-40% of buy now, pay later transactions the customer opts for a further period of interest bearing credit resulting in commission income from the outside financing company. However under inimitability it was noted that larger retailers had set up subsidiary companies to manage warranty insurance, consumer credits and promotional credits whilst regional electricity companies funded their own. This process thus enhances further the financial power of these retailers as the extra commission earned is kept within their businesses. Additionally it was also noted that some suppliers fund part of the promotion costs in order to promote sales of their brands suggesting that

some retailers were charging slotting allowances indirectly for funding the promotion of retail branding.

The type of credit offered to customers is of course dependent on customer credit worthiness. To this extent the buy now, pay later schemes is said to be aimed at well off customers. On the other hand for less well off customers the outlet for purchases is through mail order companies who had set up the facility of weekly instalment schemes whilst high street stores may offer interest free credit utilising the location effects to the full. Given that there is intratype competition between the retailers the growing use of interest free credit may be aimed at weakening the key advantages of other firms for example mail order companies. Thus the financial power of the larger retailers gained from funding consumer credit and coupled with their marketing skills of promotional credit make consumers perceive some retailers as in-substitutable.

6.2.4 Small retailers

Earlier studies on competitive effects on retail structures (Miller *et al.*, 1999) implied a mutually beneficial relationship among different types of retailers rather than an overwhelming competitive advantage for larger stores. Furthermore their study revealed the significance of personal service levels as antecedents to other retail structures but does not explain the specific strategies that are successful for each competitive situation. In this study some smaller retailer specific strategies are included to extract the effects of collective competition. The survey results suggest the survival of small retailer to a larger extent may depend on both the larger retailers and suppliers respectively.

In this survey retailers holding less than 5 outlets were considered as small retailer. In the main survey, outlets were demonstrated as the key resource that drove other resources and capabilities in the in the retail channel for white goods. The small

retailer survey results illustrate similar features where the outlets were the key resources supported by the variables of age, number of brands listed, order to delivery and are displayed in Table 15.7. The significance of outlets may also suggest traces of imperfect competition and local oligopoly as some small retailer outlets may have varied in size. This illustrates that there is less of an overlap of resource bases between the small and large retailers in the retail channel for white goods in their traded areas (Baum and Singh, 1994). However the overall results indicate that the survival of the small retailers in this retail channel are dependent on strategies that relate to key resources, competitor behaviour capabilities, and organisational capabilities.

Earlier analysis indicated some evidence of exclusive dealings of larger retailers and in the smaller retailer survey exclusivity was found to be insignificant. Exclusivity is one of the restraints that foreclose other manufacturers from distributing their brands through an efficient retailer. Manufacturers will attempt to reduce rival manufacturers access to efficient retailers by imposing vertical restraints on them. Moreover this is achieved by purchasing the exclusive rights to efficient retailers in order to increase the rival manufacturer costs of distributing their products (Krattenmaker and Salop, 1986). The purpose of a long-term exclusive contract is to tie up the best retailers and their locations. Furthermore if there are brand inferiority's as well, a double disadvantage incurs and forces other manufacturers/suppliers to seek retailers with inferior capability profiles (Comanor and French, 1985).

In the retail channel for white goods it appears that the reverse effect is taking place as exclusive dealing of manufacturers/suppliers is prohibited in the white goods industry. Instead, the importance of exclusivity in the main survey results suggests that the larger retailers are taking on the manufacturers role of controlling the actions of rival manufacturers by placing exclusive deals with selected manufacturers/suppliers for

distributing selected brands. Furthermore the insignificance of exclusivity in the small retailer survey indicates that the larger retailers are taking the initiative of purchasing the exclusive rights to a handful of efficient manufacturers/suppliers making ways for other manufacturers/suppliers to deal with retailers with inferior capability profiles. The ability of the larger retailer to diverge some manufacturers/suppliers towards inferior retailers may also be another example of retailer power in this retail channel.

In the small retailer survey the variable number of brands listed was positively associated with competitive advantages and was significant. It was stated earlier that there were more than 3000 small retailer outlets and the survey results indicate that the value for the key resource (outlets) is created from listing efficient product portfolios that maximise revenues and/or increase market shares for the small retailers.

In the MMC investigations it was found that some brands that were widely stocked by small retailers achieved relatively low market shares compared to those that were infrequently stocked achieved higher shares. For example *Creda* washing machines were listed by 41% of the small retailers surveyed had only 2.6% of the market shares when compared to *AEG* listed by only 17% of respondents achieved a share of 2.8%. The *Creda* brand is one of the inferior washing machines listed by *GDA Ltd* the market leader (supplier) and likewise *AEG* brand is one of the superior brands supplied by *Emaco*. The above example suggests that the listing of some popular brands were an important strategy for the smaller retailer. The retailers who were fortunate to stock the *AEG* brand would increase the value provided by their outlets much more than those listing the *CREDA* brand. This implies that the value element is enhanced from listing a portfolio of brands that not only delivers customer values but also maximises market shares in the traded area for the small retailer.

Furthermore, the above example indicates that the smaller retailers are participating in intra-brand competition operating in similar tiers. Hirschman (1978,1979) argues that speciality stores tend to thrive as they exhibit classification dominance within their trade lines. She argues that stores arrange themselves in a three-tier price/quality continuum in which direct competition remains within each tier. In the retail channel for white goods similar conditions are experienced with larger retailers competing on all three levels whereas the smaller retailer was competing mainly in the lower to middle price/quality tiers. *Emaco's* strategy seems to be much more efficient as they used fewer retailers to obtain the same market shares suggesting the connection between brand image and indeed the location effects. The '*Which*' magazine survey of standards of service in electrical goods in 1996 also found that, despite widely publicised claims of price cuts and special deals, the larger chains not only matched each other on price, but were the most expensive. The independents and smaller chains tended to be cheaper (MMC 1997, Vol.11, pp69) indicating that *Emaco's* pricing strategy may be a contributory factor as it complements the profile of small retailer outlets. In either case *Emaco* the less efficient supplier appears to maximise the delivery of customer values by providing product portfolios that maximise market shares for the smaller retailer in that traded area. On the other hand the largest manufacturer, *GDA Ltd's* strategy of selecting small retailers may appear to be inefficient as it seems to use more retailers than *Emarco* for the same market shares.

GDA's strategy compared to *Emarco* on the other hand may be related to scale economics. The information provided in the industry analysis chapter states that *GDA Ltd* uses about 1000 small retailers who guarantee about 60000 units of sales per annum for low and medium quality products. In order to entice these small retailers the larger suppliers could be offering benefits that they cannot refuse. These benefits could take the

form of for example, extended credit and/or extended manufacturers warranties. However, in the main survey it appeared that the larger retailers strategy of scale economies were to prevent smaller retailers from growing larger. On the other hand the above example suggests that the larger suppliers may be seeking smaller retailers to fill in the gaps created by their production capacity requirements. Therefore it could be argued that delivering customer values are subject to maximising market share values from product portfolios that vary in popularity and value creation may be subject to listing one brand or a combination of several brands. To this extent it is suggested that a portfolio of brand(s) are contributing towards the value creating strategies of the small retailers and the suppliers are ensuring the survival of small retailers whilst pursuing their own strategies of promoting their brands for fulfilling their need for market shares.

The smaller retailer contributions however stem from early mover advantages in this retail channel. In the small retailer survey age variable was found to be significant and its association with competitive advantage suggests early mover advantages, which is an impediment to imitation. In this survey the age profile of retailers in this retail channel indicated that 50% of the firms surveyed show trading in excess of 20 years. What is observed is that the two market leaders in this retail channel were incorporated in the 1930s e.g. *Comet* in 1933 followed by *Dixons* in 1937. Both firms had experiences of the radio and television businesses initially before moving into the white goods businesses in the early 1980s. This suggests that several small retailers had entered this product-market space well before the current market leaders and had located under uncertain environmental conditions (Stinchcombe, 2000). Not all-small retailers were fortunate enough to exploit early mover advantages and only a privileged few were able to reap the benefits of prime locations. On the other hand agglomeration of dissimilar types of retailers for example in the same location may be promoting multipurpose shopping as it

helps consumers to save shopping time and shopping energy (Ghosh, 1986). White goods are consumer durable and infrequently purchased and the location density of outlets for these goods was expected to be low and selective. The agglomeration of dissimilar types of retailers in that location may have facilitated better access to customers thereby making this location more valuable fulfilling the condition of rarity over time. Furthermore it could be argued that the cumulative experiences gained over time might have promoted network externalities that resulted in the enhancement of the smaller retailer reputation in that location. The small retailer thus erects intangible impediments to imitation over time and this may be a reason why the factors differentiating retailer services are less immediately obvious and that the consumers view some retailers as imperfect substitutes (Dobson and Waterson, 1996).

Customer preferences for small retailers are connected to customer needs for respective in-store services, merchandise mix, quality of goods, and the method of doing business (Hotelling, 1929). The MMC survey revealed that customers valued the services of small retailers in comparison to those offered in multiple stores (MMC 1997, Vol.11, pp.59) and that the small retailers offered free delivery and installation, favourable credit terms and warranties as alternatives to price cutting. In this study the significance of the organisational capability suggests that the conduct of business, including the level and type of pre or post sales services that is offered by the small retailer are important to both the consumer and the supplier. In this study the time taken to process and deliver orders (order to delivery) was tested and was found to be significant. This variable represented four functions: namely, inventory management; material-handling management; communications/order processing management and transportation management. Moreover the quicker delivery strategy indicates that the competitive advantage was created by the deployment of other resources and capabilities that produced

organisational uniqueness (strategic fit) and seems to be best suited for smaller firms. However this may also suggest that there may be some activities within the four functions that are also sources of competitive advantages for the retailers. For example warranty provision is linked to inventory management, free installation with material handling, credit provision with order processing, and free deliveries with transportation. In the main survey consumer credit and promotional credit (strategic adaptation capabilities) outweighed the advantages of quicker deliveries. These strategic adaptation variables were sources of competitive advantages in this retail channel suggesting they were indirectly associated with the functional capabilities that have the potential to create firm heterogeneity.

In the small retailer survey of white goods the strategic adaptation activities within the elements of working capital were tested for financial power. The variables of stock-turns, average credit days, third party credit card usage and promotion were used for these purposes. These variables were considered as they represented activities within the working capital that represented both the product and non-product activities relating to the small retailer firms. Stock-turns measured the efficiency and effectiveness of how quickly stock could be converted to cash whilst the average credit acquired from suppliers was to highlight supplier funding. Both credit card usage and promotions were used for testing the non-product activities that related to retailer management of a payment facility and free/extended warranties. All four strategic adaptive capability variables were found to be insignificant explaining that the small retailers did not have the capabilities to set *ex ante limits* to future competition. There was no support for inter-organisational capabilities also perhaps suggesting that the capability profiles that help set *ex ante limits* to future competition in the retail channel for white goods are mainly associated with scale economics.

6.3 Directions for future research

This study has several implications for future research. First and foremost, it is a step closer to measuring competitive advantages in a specific retail channel. The ranking of resources and capabilities may facilitate computation of formulas to measure competitive advantage in the future based on end use consistency of product line.

The ratio of small retailer outlets to large retailer outlets included all classes of outlets and was a measure of the efficiency and effectiveness of the retail structure for white goods in the UK. A future study on the actual mix of outlets in the UK may thus provide answers to acceptable number of outlet classes that are needed to balance the needs of the consumers, manufacturers/suppliers and the retailers. Similar retailing studies in Europe may provide international comparisons necessary for not only the structuring of an efficient retail channel but also for analysing the concentration effects of firms within that retail channel.

About eight firms supply approximately 80% of products to the retail channel for white goods dominate the supply industry. The understanding of the types of competition in the white goods industry may also be important. The inter-organisational relationships with either a perfect or imperfect supplier competition may provide other reasons for why the retail channel for white goods is imperfect but efficient. The dimensions of situation, structure, process and outcome are important elements for inter-organisational relationships (Van de Ven, 1980).

The areas of particular interest are in the structural and processes as they refer to governing mechanisms that characterise inter-organisational relationships and activities promoting flows of product and information between organisations. With this in mind it has been recognised that using the product line consistency approach used in this study may have its limitations. The focus on the retail channel as opposed to firm level analysis

may have opened up new avenues for the understanding of retailing especially the competitive interactions among retailers. The lack of precise taxonomy on retailer types has led to non - exclusive categorisation of competitive interaction among stores. It was recognised that the ambiguity in the definition of retailer types encouraged Miller *et al.* (1999) to define the three types of retail stores using a product consistency approach. This study however goes a step further recommending competitive interactions between outlet classes for example high street, shopping centres and out of town outlets etc for electrical goods. The two streams i.e. white and brown goods that flow out of these outlet types make up the retail channel for electrical goods. The testing of portfolios of electrical goods by outlet types may be the way forward and may be another way of explaining the efficiency and effectiveness of value creating strategies that maximise returns and / or increase market shares for the retailers in the retail channel for electrical goods.

6.4 Managerial implications

The extended RBV approach used in this survey has several implications for managers, practitioners and regulators involved in the retail channel for white goods. Perhaps most importantly the analysis identified competitive advantages in the retail channel and provides a basis for ranking important resources and capabilities at the firm level. The linking and ranking of resources and capabilities is also expected to benefit regulators, as they would be in a better position to address competitive issues accordingly.

6.4.1 Developing retailer strategies

The initial task for all practitioners is the identification of key resources and capabilities that lead to competitive advantages in the marketing channel. The above knowledge can help firms to leverage existing resource positions into superior future

positions (Winter, 1994; Dierickx and Cool, 1989). The linking and ranking of valuable resources and capabilities to competitive advantage may be of importance to retailers searching for value creating strategies whilst competing in national and / or local markets. In this study the ability of the key resource (outlets) to manipulate other resources and capabilities resulted in delivery of customer values from product portfolios that maximise returns and / or increase market shares for their shareholders. It was also demonstrated that for a resource to be a source of competitive advantage and for sustainability of competitive advantage the resource had to meet the conditions of value, rarity, inimitability and insubstitutability.

Value is created from market factors as well as from market imperfections. A firm's value creating strategies should take into consideration market factors that drive retail structures as the market structure is a major determinant of retail structure and consists of variables that create or impede demand for retailers (Miller et al., 1999). The value creation in the national market stems from cost focus strategies whilst in the local markets, market focus was significant. Furthermore the imperfection of the market may also highlight the sources of competitive advantages in that that market. In the market for domestic appliances market power was detected from barriers to entry, economies of scale, national/local market power and retailer differentiation of services.

Value maximisation is individual to the firm and is dependent on the decisions it takes to marshal its resources and capabilities and allocate scarce resources to competing activities. The firm directs the transformation process in order to deliver customer values from product (s) and / or services in the market place where the competitive forces reward efficiency. This study has digressed from the firm level analysis to a resource as an unit of analysis in a retail channel. In other words a firm may be competing in one retail channel or in several retail channels as it diversifies its customer values and the sharing of

its resources and capabilities may cause problems relating to allocation of costs and efficiency measures for multiproducts.

The sharing of retailer resources and capabilities however resulted in significant retailer economies of scale triggered by efficient product portfolios in the national and local markets. Moreover significant economies of scale from marketing was also achieved and activated through promotion in the national market. The advantage of using the retail channel approach helps with the identification of competitive advantage in each market as demonstrated in this study i.e. national / local markets. For example this study detected economies of scale from one product line (white goods). It is also known that several retailers compete in white and brown goods suggesting that there are possibilities of exploiting multiple economies of scale from product portfolios and marketing skills in national markets. The ability to convert retailer barriers to entry into an entry barrier for the manufacturer/supplier may be imperative for controlling prices and therefore the profits available for these retailers. Margin support to retailers was the method used by retailers for conversion of entry barriers. In the local markets the combination of market focus strategies brought together the competitive advantages that emerge from small retailer location and reputation effects and their linking with logistics.

For retailer outfits that wish to diversify across the retailing of a wide range of domestic electrical goods it has also been demonstrated how diversification into related products might be a successful value creating strategy. In this case it was highlighted that the surplus capacity of a specific resource could be put to better use if the type of diversification can be identified. The combinations of the physical resource (outlets), intangible resource (exclusivity arrangements), financial resource (payment facility) together with marketing skills (promotions) were responsible for sustaining competitive advantage in the retail channel for white goods. The type of diversification was related

and this study demonstrated that the current market leaders diversified into white goods from brown goods. Furthermore it was also observed that for exclusive arrangement i.e. the power to arrange product access, and the power to set up a payment facility required retail branding. For the larger retailers the ability to enhance retail branding by means of non-product activities is important for countervailing the selling power of supplier brands and also for setting *ex ante* limits to competition

However the downside to related diversification needs consideration. The firms current core competencies in the product channel facilitated by its shared resources and capabilities may have an impact on current efficiency levels. The measurement and the maintenance of efficiency levels expose the limitations of this analysis in respect of the focus on the retail channel as opposed to a firm level analysis. It was previously stated that some retailer's trade in both white and brown goods. The major issues may relate to activities connected with order processing and communication, material handling and warehousing, inventory management and transportation. For example white goods are bulky items whereas brown goods are smaller and therefore may require the application of different storing and handling techniques. The same applies to delivery systems too and as a consequence diversifying into related products may require additional training and control systems. The cost of setting up individual control systems for each retail channel may be expensive and the allocation of resource and capability costs may also be difficult and counter-productive. On the other hand a firm-level analysis may use performance measures based on weighted averages. A similar approach may be undertaken in the retail channel but its usefulness may depend on the magnitude of the learning benefits and how easily resource and capability costs can be allocated to each retail channel.

The issues may also concern the after sales care for white and brown goods. At present it appears that a large proportion of repair works and after sales services for white goods were carried out by established manufacturers/suppliers. Some retailers subcontracted the repair and service work to local experts. *Dixons* however uses *Mastercare Ltd* its servicing subsidiary for repairs and after sales service for products supplied by its stores. The after sales care services for brown goods are mainly the responsibility of the retailers. What this means is apart from having access to related products firms wishing to diversify into related products must also have in place reliable warehousing, delivery and after sales care systems if they were to succeed.

The mix of instruments that maximises profits and / or market shares for the retailer should therefore vary from market to market for example, markets with the greatest dispersion of time have the greatest variation in opportunity cost of time (Winter, 1993). The optimal mix of competitive instruments for example price and services the retailers select must be aimed at attracting the consumers into the market and away from the other retailers. Moreover in this study the time cost of obtaining the product was not important in national markets and was significant in local markets. This indicating that in national markets for example the provision of credit facilities, warranty insurance and after sales services together with price competition may be of significance. The competitive effects stemming from the application of a mix of instruments may have an impact on performance measures. This means setting performance targets for each market may be appropriate for those retailers competing on a local and/or national basis.

For retail management experiencing strategic advantages/disadvantages, it is important to understand how to address the problem connected with value maximisation. It was previously stated that capacity utilisation is closely related to scale and is both a cost and value driver (Stabell and Fjeldstat, 1998). Based on the capacity available to the

firm, management can influence both scale and service value maximisation. The efficiency and effectiveness of value maximisation strategies for scale and services which is the intended strategy can be tested by setting realisable standards on prices, volumes and mix of appliances that is offered to consumers. The variance analysis between the intended and the realised strategies could point to both deliberate/emerging strategies that are required to reach firm objectives (Mintzberg *et al.*, 1998). An approach to finding the differences in the intended and realised strategies as stated earlier is to compute variance analysis on profit margins of product portfolios in terms of prices, volumes, and the mix of products (Wilson and Chua, 1994). This is an important tool that is available to retailer management and it is imperative that the retailer management information systems provide this information as a daily routine.

6.4.2 Manufacturer / Supplier strategies

The knowledge of linking and ranking resources and capabilities to competitive advantage can help firms to leverage existing resource positions into superior future positions (Winter, 1994; Dierickx and Cool, 1989). The ranking of valuable resources and capabilities may be of importance to both manufacturer/supplier and retailers. For example the knowledge of key retailer resources and capabilities may be useful for the manufacturer/supplier for determining effective vertical restraints for appropriate markets in order to bring dealer interests into line with their own as national restraints are unlikely to be totally effective. The benefits of using such an approach would be to manipulate externalities for example retailer independence effects, retailer (intrabrand) competitive effects, dealer free riding effects and retailer location effects so that value maximisation can take into consideration retailer power in local markets. Dobson and Waterson (1996)

explain that there are a number of empirical studies that show retail prices are positively related to local retailing concentration levels.

Moreover the results of this study suggests that that the manufacturer/supplier must promote brand loyalty at the national level. The provision of support services for larger retailers who carry other brands should be selective and relate to the respective location effects as retailers may use activities relating to retail branding to countervail the selling power of supplier brands. However if the manufacturers/suppliers can provide delivery and after sales care services on a national level an opportunity may present itself to exploit multiple economies of scale/scope triggered by servicing multiproducts. In this study it was also revealed that economies of scale/scope were present in local markets for the retailers. Hence a national and / or local network of delivery and aftercare systems may be sources of competitive advantage for the manufacturers/suppliers and may be used to countervail some of the selling power of retail branding in the retail channel.

The small retailer appears to attract customers from the location effects and their reputation in local markets. It was also demonstrated that the listing of popular supplier brands was also important to the small retailer. This means that the supplier branding was important to the smaller retailers of this retail channel. Suppliers must give due consideration to trading with small retailers as it was demonstrated that larger retailers attract customers from non-product activities that related to retail branding and that the small retailer did not. Dealing with a large number of small retailers may have the advantages of preventing for example free riding, maintenance of product quality, switching to rival brands and the protection of manufacturers property rights in product innovation and design (Marvel, 1982; Steuer, 1983; and Ornstein, 1989). Providing more support for the small retailer could be a small expense compared to those provided for the large retailer as indicated in this study for example margin support. The suppliers on the

other hand must balance these benefits against the extra administration and transportation costs that could be incurred in the process.

This study has already demonstrated how inferior retailer resources (small retailers) survive against superior retailer resources (larger retailers). This study also revealed that a large proportion of supplies to this retail channel was imported. The larger retailers had the resources to import but may be clocking in transportation costs both inward and outwards whereas the transportation costs for the small retailer may just be on the outward journeys to the consumer. It was also demonstrated that the smaller retailer gained competitive advantage from logistics and the effect of transportation cost on the minimum efficient scale although not known at present may be of significance in the retail channel for white goods. However the minimum efficient scale without transportation costs are normally higher than it would be if transportation costs were included. Long - term transportation costs may be expected to increase if the retailer capacity was to increase. On the other hand the smaller retailer transportation costs may be lower and the product costs higher due to the lack of purchasing power. However the small retailers total costs may not be substantially higher than that of the larger retailers. Hence this may be another reason how the smaller retailers co exists with giants and why the collective power of small retailer resources could control the magnitude of the economies of scale that is available for exploitation despite the view that minimum efficient scale is a barrier to entry. Therefore the supplier strategy to increase the transportation costs incurred in supplying to more small retailers may have the effect of reducing the retailer minimum efficient scale prevalent in the retail channel. Moreover this strategy could result in bringing in new retailers to the channel and also better margins for the suppliers.

Nevertheless the smaller retailers transportation costs may be lower whilst the larger retailer importing large quantities of goods may be benefiting from quantity discounts on haulage. Furthermore it was noted in the industry analysis chapter that the largest retailer had 19 warehouses and the other leading players had 8 warehouses between them and controlled their own delivery systems. The smaller retailers replenished stock as and when and depended on supplier delivery systems for delivery of products into their stores. The diversification strategy of manufacturer/supplier into delivery and after sales care systems may be subject to competition from hauliers and other firms already set up for these purposes. However the question that needs to be answered relates to which system is better? An in house system or sub contracting.

The advantage of using a haulier may reflect on cheaper cost of delivery and the disadvantage display loss of control through product damage due to the nature of packaging. In most cases the responsibility for damage falls on the manufacturer / supplier as the damaged product is only exposed on delivery to customer homes after it has been handled a few times. Therefore the larger retailers whilst enjoying the benefits of lower product costs are also able to avoid product damage costs incurred by their delivery systems. Earlier sections indicated that the larger retailers had warehousing facilities and furthermore the suppliers margin support influenced the conversion of retailer's barrier to entry into a supplier's barrier to entry. A similar process is experienced in this case and the conversion into a supplier barrier to entry is influenced this time by the supplier's nature of packaging. The dual benefits enjoyed by the retailers especially the retailer ability to transfer product damage costs to the supplier further enhances retailer power and directs attention to the nature of packaging of supplier products.

In the absence of wholesale prices in this retail channel there is also the scope for the suppliers to earn better margins. It was also stated earlier that the proportion of supplies to buying groups was very small and there may be scope for growth in this particular area. Moreover the research on grocery markets divulged retailing as most concentrated in the UK with the buyer group share being equal to the retailer share. Whereas in other countries in Europe the buyer share was significantly more concentrated than the retailer share. Furthermore it was also stated that UK retailers simultaneously enjoy selling power and buying power and may primarily explain why UK supermarket chains are so highly priced and profitable to European average (Dobson and Waterson, 1999). The presence of powerful buyer groups may on the other hand restrain otherwise powerful sellers.

6.4.3 Regulator

One of the conclusions of the 1969 MMC report on RRP (recommended retail prices) was that the recommendations of resale prices, in conjunction with factors such as restriction of outlets and monopoly in the supply industry, might prevent price competition in retailing (MMC 1997, Vol.1 pp.49). Moreover it has already been suggested that retail developers and community planners should concentrate on providing a mix of stores rather than an agglomeration of stores (Miller *et al.*, 1999).

In this study an attempt has been made to demonstrate that in most areas of retailing in the UK may be imperfectly competitive and as a result there appears to be benefits of lower prices for the consumers. On the other hand the current retail structure may provide lower prices which in turn could have the effect of reducing the consumers purchasing cycle from an average four years to two years and thereby increasing

consumer spending. Against these benefits there are the effects of inflation and recycling issues to consider.

Furthermore in this study it was explained earlier that the inclusion of all outlets irrespective of its scale or saturation detected some of the variation between the smaller retailers too. However, despite the advantages of location and size of outlets of larger multiples, under the existing retail structure the collective power of the smaller retailer outlets supported by the suppliers may appear to indirectly balance the extent of the benefits of economies of scale available to the larger retailers. On the other hand the insignificance of stock turns in both surveys seem to suggest that products are close substitutes and may also support 'symbiosis' in this retail channel i.e. retailers have mutual beneficial effects on each other.

It was also stated earlier that the total number and the mix of outlets used by multiples that specialised in white goods were 1478 in number and the outlets belonging to small retailers amounted to about 5100 (Table 2.1). Hence the strategy of the larger retailer to locate into retail parks may be to exploit further the advantages of economies of scale/scope and thereby to weaken this collective power of the smaller retailers. Therefore, with the existence of possible traces of imperfect competition in this retail channel, it is questionable whether the 1969 MMC ruling on restrictions on outlets as one of the component preventing price competition in the UK still hold?

6.4.4 Other competitive models

Competitive models such as SCP are important in isolating competition applicable to a particular industry condition. Likewise, both SWOT analysis and value chain analysis explains how value of the firm can be enhanced. The extended RBV on the other hand, explains how and why a particular resource is more valuable than other resources and

directs attention to strategic investments in internal activities that could set *ex anti* limits to future competition. Furthermore the linking and ranking of resources and capabilities to competitive advantages produce better explanations at present as to how competitive advantages can be sustained over a period of time. Coincidentally, in the recent past many theorists have assessed the impact the diffusion of RBV has had upon the field of strategy and cognate business activities and are very enthusiastic with the prospects of furthering their interests with RBV.

6.5 Limitations

This study has focused on resources as an unit of analysis in the retail channel as opposed to a firm level analysis and has several limitations. The structure - conduct - performance paradigm suggests that firm's performance is the result of competitive interaction. The conduct of firms is determined by the structure of the industry, which identifies a set of industry conditions that impact on the behaviour and performance of firms. The RBV on the other hand suggests that the industries structural features are the result of the organisational capabilities of its constituent firms, which have accumulated over time (Cockburn *et al.*, 2000). Hence in this study it is assumed that the retail structures features that exist for the retail channel are similar to those in industries structural features and that the RBV could be applied to both structures. Furthermore only the conditions of value, rarity, inimitability and insubstitutability are considered for a resource to be a source of competitive advantage. In this study the use of resource as an unit of analysis also exposes the limitations regarding the allocation of costs and efficiency measures when resources and capabilities are shared in related diversification. For links between resources and the type of diversification just three resources i.e. physical, intangible and financial resources were considered with the knowledge that

there could be other resources that could contribute to competitive advantages from related diversification. Furthermore for retailers wishing to extend the range of goods sold beyond white electrical goods i.e. unrelated diversification this analysis has identified how *ex ante* limits to competition could be set in this channel from the use of financial resources. Once again there could be other resources or resource combinations that can do the same job.

The survey was conducted at one point in time using cross sectional data that relates to a static resource base logic. This was considered as a useful starting point in the absence of longitudinal data. The data for the study was collected from single respondents namely either a purchasing director or the managing director of their respective firms. Collecting data from two informants within the same firm had been considered but was found to be impractical, especially as the white goods industry had undergone investigations from the regulators recently.

Similar reasons apply to some important variables not considered in this study especially the firm profitability, as it may have been an ideal measure for competitive advantages. The limitations attached to using market share as a proxy for competitive advantage was discussed in section 4.4.1. There may be other variables of importance for example free/ extended warranties, after sales services that may account for variation between firms in this retail channel. The measuring problem attached to these variables is a reason why they were not considered.

The approach used in this study may also have generalisability limitations as it applied mainly to the retail channel for white goods. However, the use of white goods as a single trade line is consistent with previous research (Ingene & Brown 1987; Miller *et al.*, 1999), and its uses have been highlighted in this study.

Every effort was made to design a model that facilitated not only the generalising of relationships but also a process for testing competitive advantages in local/national markets. It is also acknowledged that the dynamics of diffusion employed to extricate the effects simultaneously in a functional format may also be subject to more questions than the answers. The model used in this study has at-least facilitated the use of specific strategies relating to competitive advantages that resulted from retailer competition.

Two sets of results were used for analysis. One set had heteroskedastic consistent standard errors whilst the other did not. However in this study the moderate violations of parametric assumptions seems to have had little effect on substantive conclusions (Cohen, 1969). It is now quite common to report such results, although not so much in management and the preference is for hetroskedastic consistent errors.

It is also assumed that managerial behaviour patterns are the same for both white and brown goods sold from some retailer outlets. The responsibility for example, for after sales services is sub contracted by retailers of white goods to manufacturers and/or specialist firms. On the other hand, after sales services for brown goods is the responsibility of the retailers whilst some large retailers provided after sales services for both white and brown goods. Once again extracting after sales costs for white goods from consolidated accounts was a problem.

Although there could be slight differences in the various strategies used by the retailers, it was assumed that there would be no major differences in their management of both social constraints and normative rationality as these are sources of competitive advantage (Oliver, 1997). Then again, managers of some firms may have had the opportunity to enhance their management skills through experiences gained from dealing with a customer base with different needs which may then result in effective management of both social constraints and normative rationality.

Some small retailers included in the survey traded in both white and brown goods and were also selling other small domestic appliances of low value. These values may have been included in the turnover figures requested in the questionnaire. The small retailer turnover was so small, compared to the total domestic appliances market, their inclusion was considered to be insignificant.

6.6 Future use of model

The model used in this survey is imperfect, but it does have some uses. Resource, capability ambiguities have prevailed for a long time but this demonstration may be a step forward in at-least reducing ambiguities in order to establish firm identity and its strategy frameworks which maximises firm uniqueness. An insight to this study and the performance of the model for future uses are demonstrated below by addressing some of the issues raised in the *MMC* investigations.

Lexecon Ltd (*MMC* 1997, Vol.11 pp.138,139) who defended a major supplier raised several issues relating to *MMC* decision on the two complex monopoly situations. One of the issues related to the failure of the *MMC* to demonstrate the link between price variability and competitiveness.

The link between price variability and competitiveness can be demonstrated by including a price influence variable (competitor behaviour variable) in the equation used in this study. A dichotomous (dummy) variable testing for price influence worded as 'do you use suppliers RRP's (yes or no) could provide either the significance or insignificance and therefore the link. If links were evident a further analysis could take place in more detail using a logistic regression approach. In their survey the *MMC* examined the modal price charged for any given model (appliance), the proportion of sales within a given percentage of the RRP and the covar (a measure based on the

standard deviation of the distribution that summarises the spread of prices relative to the mean) (MMC, 1997.Vol 11 pp.117).

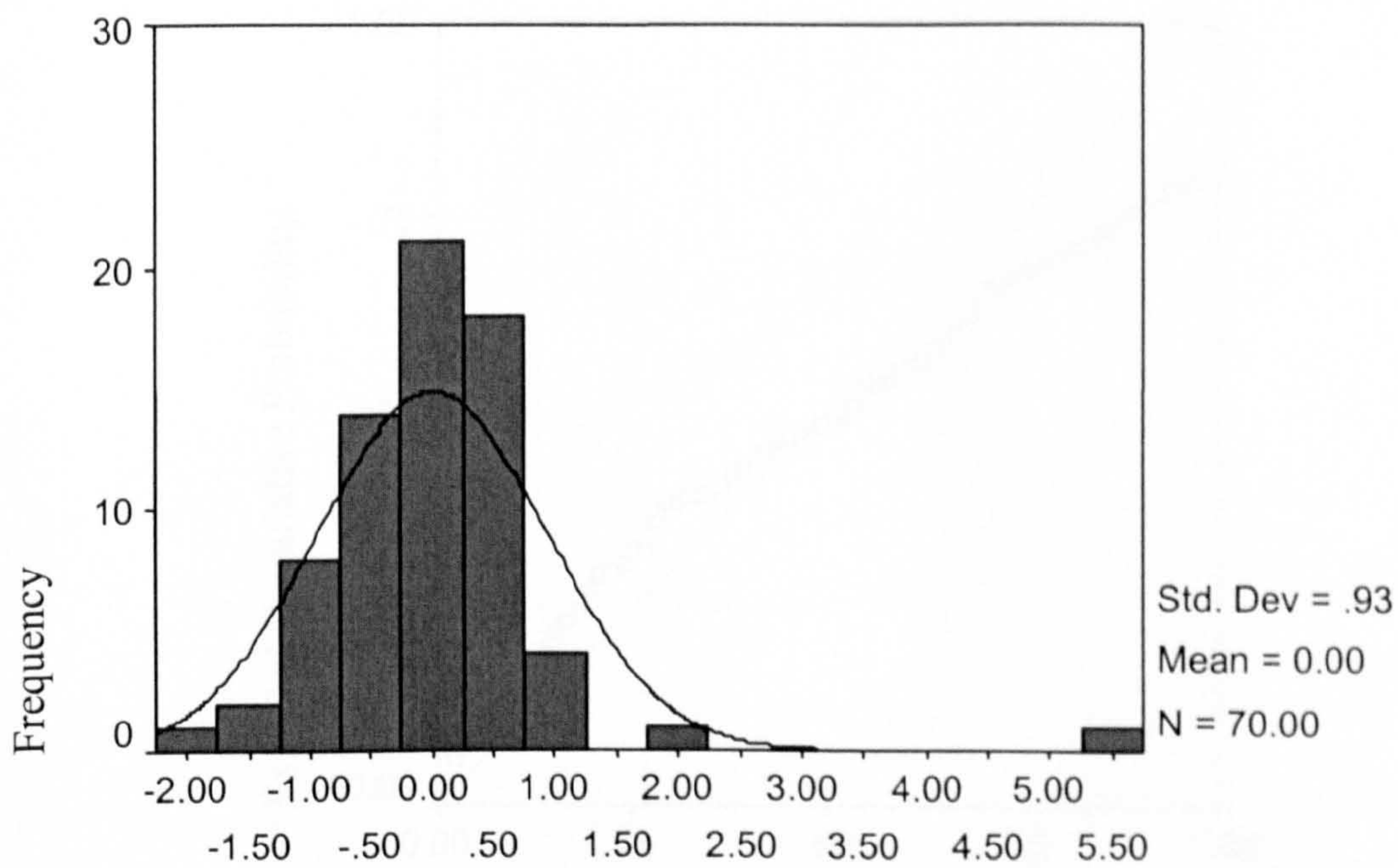
Lexecon Ltd. also claimed that the *MMC* failed to consider non-price benefits such as interest free credit, free delivery of appliances and free gifts. The inclusion of the promotion variable demonstrated significance and establishes links to competitive advantages. Likewise non-price benefits mentioned above could also be applied to the white goods industry in a similar fashion.

Appendices

Appendix - A

Histogram

Dependent Variable: Mar share

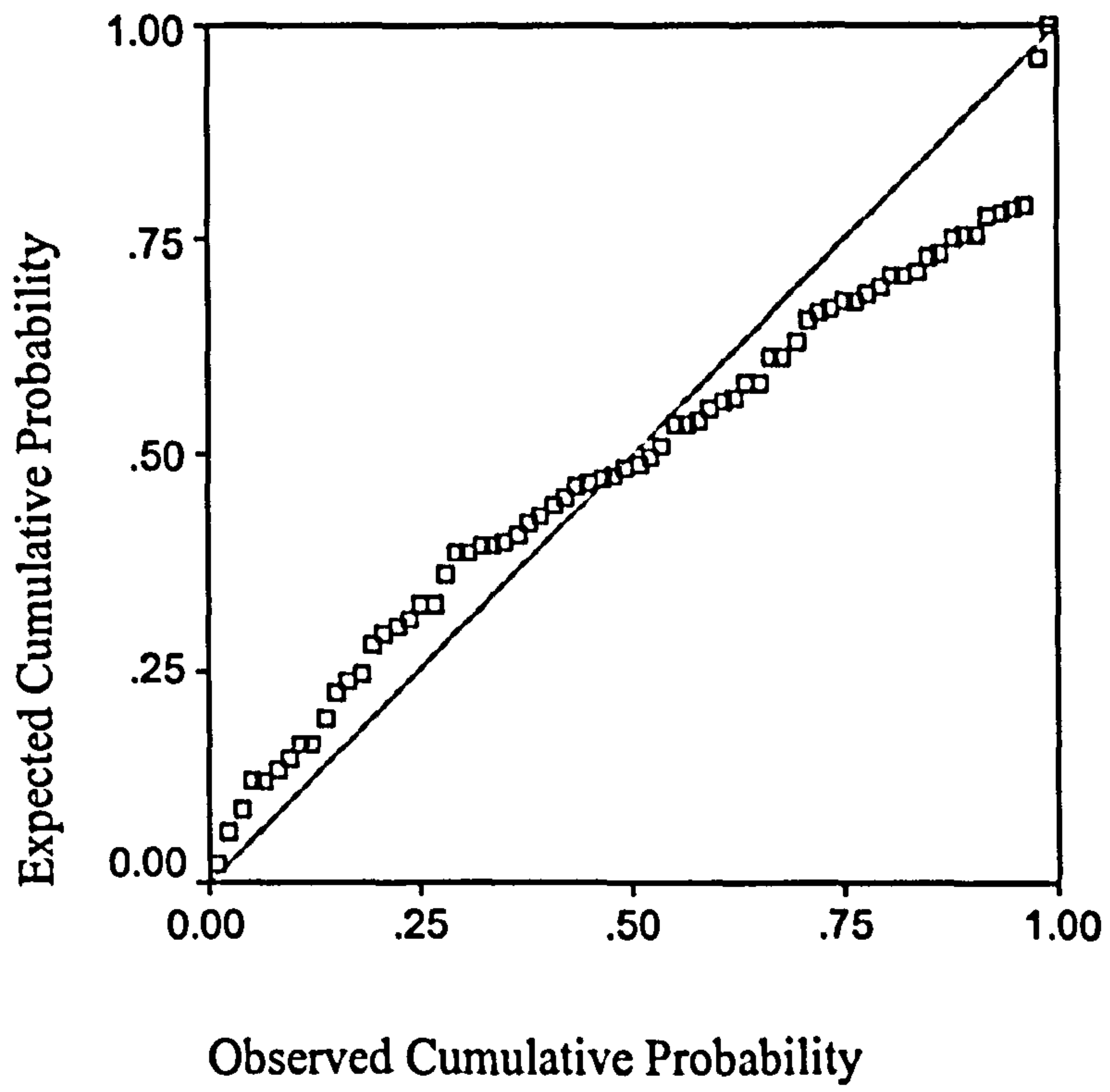


Regression Standardized Residual

Appendix - B

Normal P-P Plot of Regression Standardized Residual

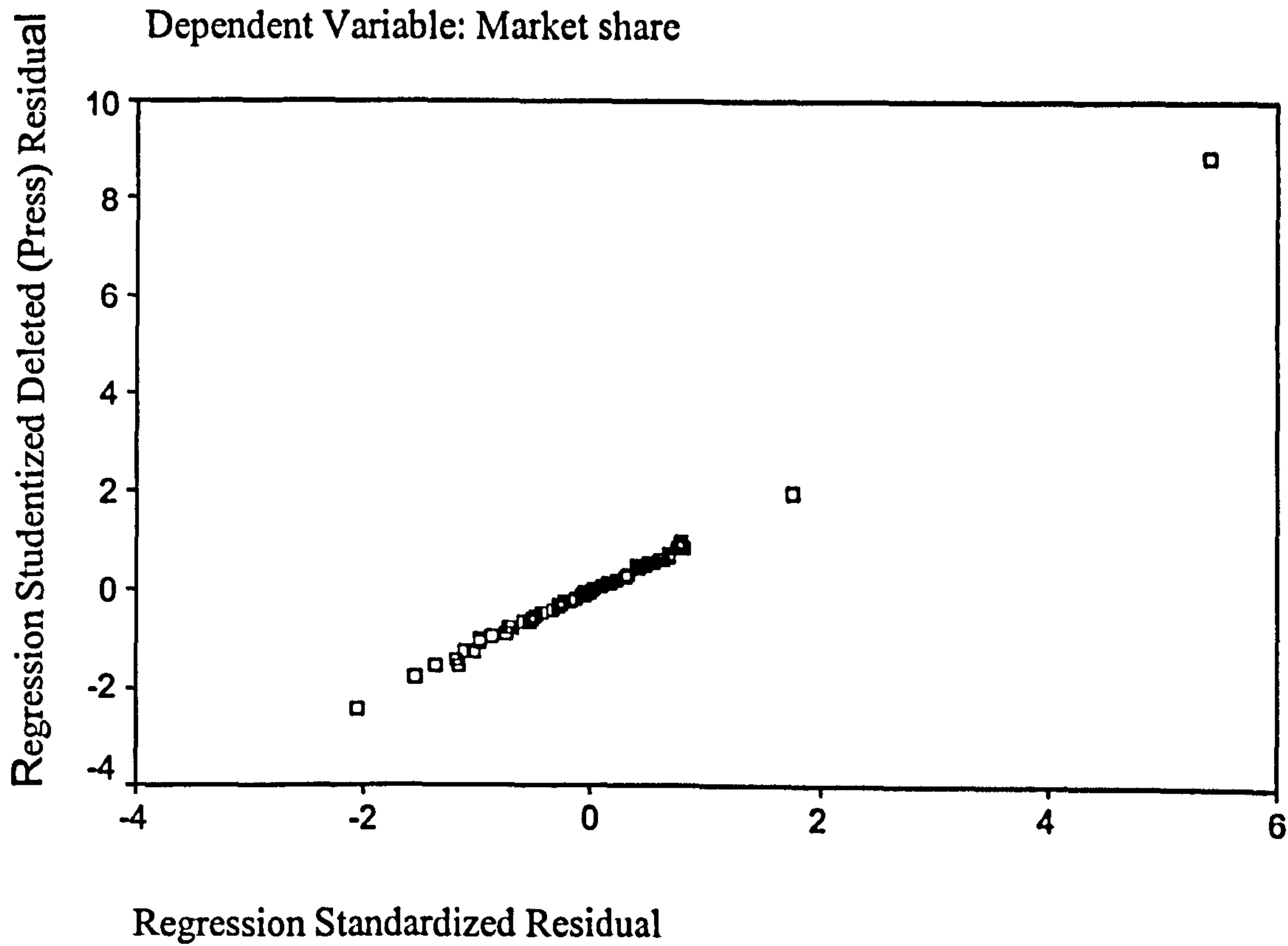
Dependent Variable: Mar share



Appendix - C

Scatterplot

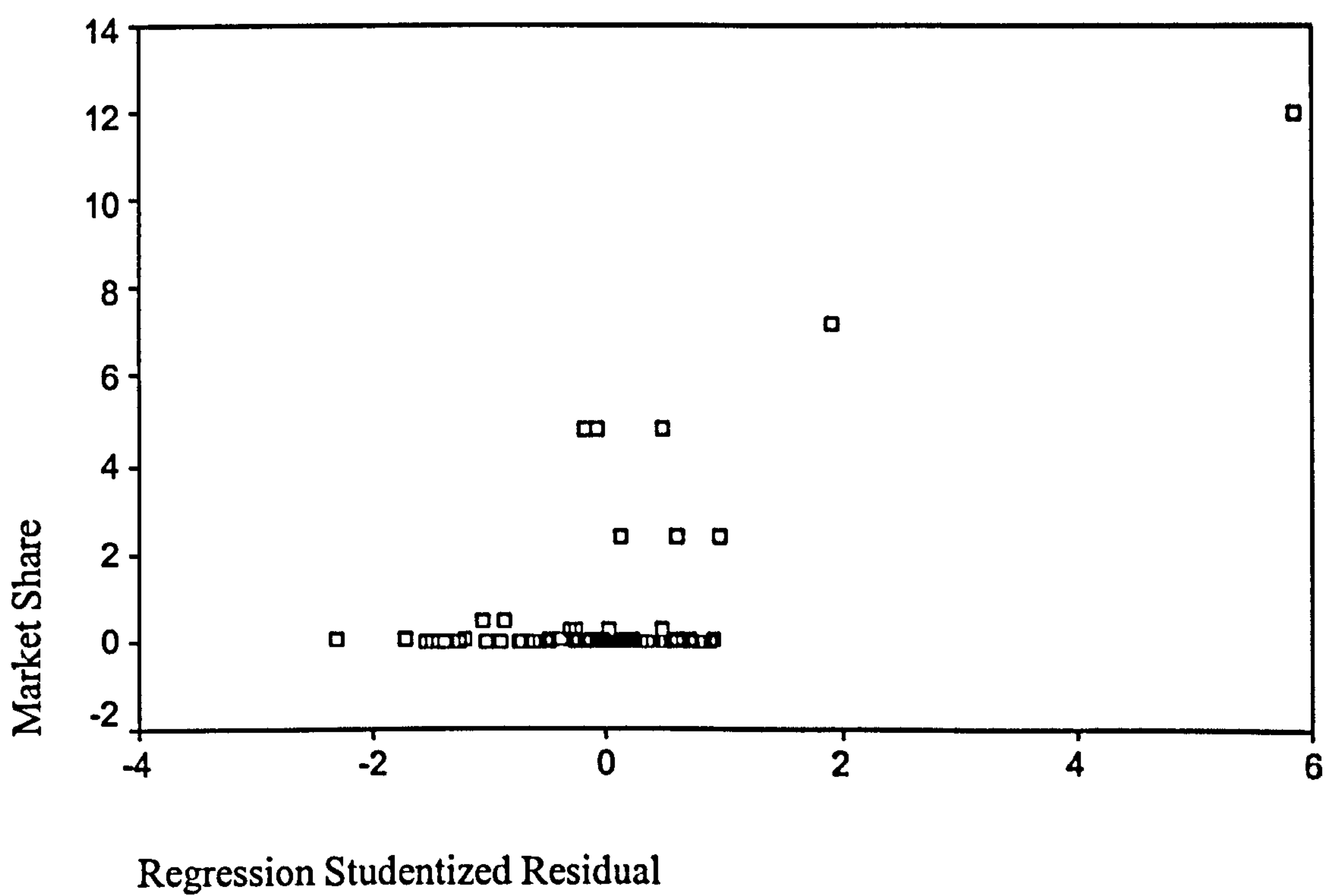
Dependent Variable: Market share



Appendix - D

Scatterplot

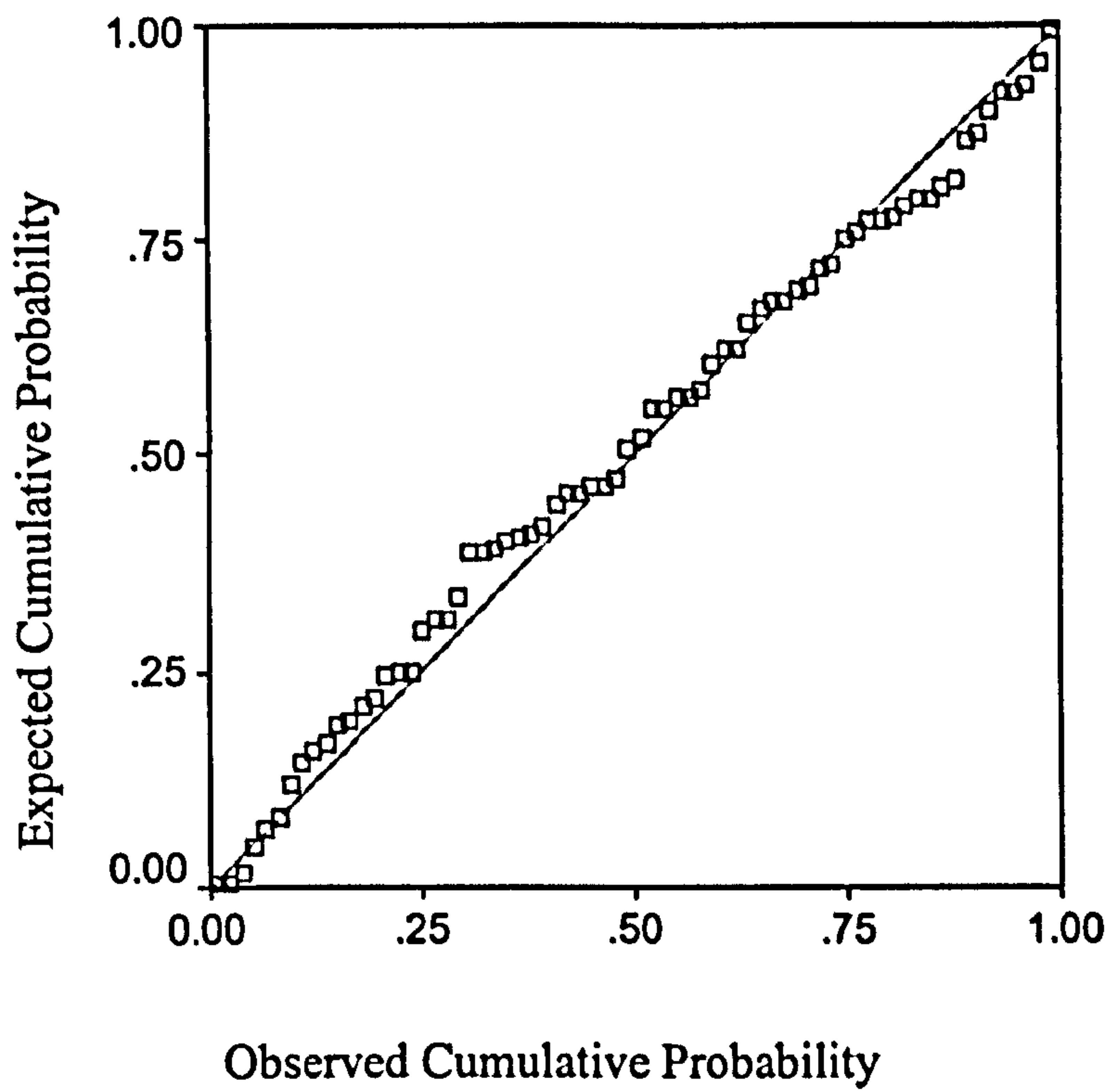
Dependent Variable: Market share



Appendix - E

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Market Share



Appendix F

PRIVATE & CONFIDENTIAL

SURVEY OF RETAILERS OF WHITE GOODS

PLEASE ANSWER ALL QUESTIONS

Q1 Name & Address of Organisation

Postcode: _____

Q2 Details of person answering survey questions

Name _____

Position _____

Telephone Number _____

Q3 White Goods Sold (Please tick)

Home Laundry []

Cookers []

Microwaves []

Dishwashers []

Refrigerators & Freezers []

Other []

Q4 How long have you traded as a retailer of White Goods? [] year(s)

Q5 How many outlets are there in the Business as a whole? (Please tick)

>300 [] >200 [] >100 [] >50 [] >25 [] >10 [] >5 []

Other [] State Other _____

Appendix F

PRIVATE & CONFIDENTIAL

Q6 How many brands of White Goods:-

- a. Are currently listed in your Business?
- b. Does your Business have exclusive Distribution rights to?
(Please include own Label Brands and Suppliers Brands)

Q7 For the year ending 1999/2000

a. What is your Sales Revenue per annum for White Goods? (please tick)
(m-millions, k-thousands)

(£) >250m >150m >100m >50m >25m

>10m >5m >1m >500k >100k

Other State Other: _____

b. What proportion of your Sales Revenue is on Promotional Credit?
(Interest Free Credit and/or Buy Now Pay Later) %

c. What proportion of your Sales Revenue is on Third Party Credit
Cards? %

**Q8 What are the average days credit you receive from your suppliers of
White Goods? (please tick)**

0 30 60 90 180 Other State Other _____

Q9 What is the frequency of your White Goods stock turnover?
Number of times per year (value of Annual Sales/Average value of Stock Held)

**Q10 What is the total time taken from Receipt of order for White Goods from
Customer, to delivery of Appliances to Consumer? days**

THANK YOU FOR YOUR CO-OPERATION

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