



An exploratory study into the drivers of channel change

An exploratory study

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Abstract

Purpose – The purpose of this paper is to aim to understand the factors influencing the magnitude of change in distribution channels. Distribution channels are slow to change due to a number of factors. Yet, the distribution mix is a vital part of a company's competitive position and companies must, therefore, constantly examine their mix of channels to most closely approximate the changing needs of its customers. It therefore is important to look at the factors influencing change in distribution.

Design/methodology/approach – A model of channel change is developed and tested with data from financial services organizations in the UK. In addition to quantitative data, the researchers also collected qualitative feedback.

Findings – The degree of channel change is related to: volatility in customers' needs; the sophistication of the target customer; product sophistication; environmental conflict; volatility in competitors' strategies; scope economies; and company size.

Research limitations/implications – The sample size is relatively modest, although this has not prevented the emergence of significant results.

Practical implications – The results of the study are important for both academics and practitioners. It helps alert practitioners to the factors that affect channel change. For academics, it demonstrates that this complex subject can be researched. It also raises some research issues that might be taken on board in future studies.

Originality/value – This article is one of the first to test a set of hypotheses regarding the drivers and inhibitors of change in distribution systems at the micro level.

Keywords Financial services, Distribution, United Kingdom, Change management, Modelling

Paper type Research paper

Distribution tends to be one of the most immutable of the marketing mix decisions, but a number of external factors have led to an increase in its importance, namely, pressures on competitive advantage, the increased power of distributors, pressure to reduce distribution costs, a new stress on growth, and new technological developments (Alba *et al.*, 1997; Benjamin and Wigand, 1995). In this context, it has been asserted that "channel design should be used as an integral part of the firm's attempts to gain a differential advantage in the market" (Rosenbloom, 1999, p. 199), and in trying to achieve this, many companies have radically reorganized their distribution channels and are making experimental investments in electronic commerce (Alba *et al.*, 1997).

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In an early contribution, Gultinan (1974, pp. 84, 89), stated, "Since technology and consumer buying patterns are always changing...the normative channel is always changing. Thus evolution would appear to be a continuous process" and added that "optimal channel configuration is never achieved". In this context, it is important to understand the forces underlying the evolution of channel strategies at the micro-level. In fact, this has been considered one of "the fundamental tasks of channel research" (Sharma and Dominguez, 1992, p. 1). The statement that "little attention has been given to questions of the maintenance, adaptation, and evolution of marketing channels as competitive entities" (Stern and Reve, 1980, p. 53), still remains true today. Not surprisingly, it seems many companies find channel change difficult to manage (Stern *et al.*, 1993), and improperly planned channel change can increase channel conflict, and decrease channel satisfaction and channel performance (Webb and Hogan, 2002).

Consequently, it is the purpose of this article to investigate the extent to which a number of factors may affect the degree of change in distribution arrangements, testing the propositions on a sample of UK financial services organizations. This is an under-researched topic. With this in mind the article is organized as follows. The first section discusses the causes underlying channel inertia along with the research on channel change. Subsequently, a number of hypotheses regarding main and moderating effects are derived and methodological issues examined. Next, the results are presented and some implications for managers are derived.

Research background

The causes of structural inertia in distribution systems can be placed in two categories, channel relationship issues and firm issues.

Channel relationship issues

A channel system encompasses a division of distribution functions among channel members, who receive a certain compensation contingent upon the extent to which they take on such functions. Modification of a channel structure frequently entails a change in the allocation and importance of tasks to be performed and this, naturally, affects the compensation of existing channel partners. As these changes can breed destructive conflict in the channel system (Stern *et al.*, 1993), they frequently end up negating any channel change initiative. An additional ingredient is that a distribution system involves the orchestration of a series of individuals and organizations to enable the product to reach the consumer in the most efficient and effective manner. Co-ordination of activities allows channel members to maximize the gains from interdependent relationships but, of course, the development of these relationships requires a long period to select and train channel members, and to nurture such relationships. The fact that distribution channels have a social character (Stern and Reve, 1980) also imparts durability to channels. The repeated interactions, the mutual assistance, and the episodes of support given to those partners temporarily facing difficult times, tend to reinforce the distribution knit and to perpetuate current channel systems. Finally, usually there are legal ties uniting the participants in the channel system. These legal bonds, often with financial penalties for rule violations or changes in terms, are in part to protect the interests of the channel members, and also end-up mitigating change efforts.

Firm issues

Establishing a distribution system frequently implies heavy financial investments such as in a branch network, warehousing, or a call centre. These investments may not be easily redeployed, as divestment decisions can sometimes be financially costly. There are also political issues at stake (Stern and Reve, 1980). These can involve, for example, the preferences of managers for integrated channels and, therefore, a refusal to introduce different actors to the system. Likewise, some managers may try to protect their positions from any channel changes that may eventually adversely affect them.

Not surprisingly, Stern *et al.* (1996, p.188) conclude that “of all the marketing decisions an organisation can make, decisions regarding distribution are the most long-term in nature”. In fact, it seems that many managers prefer to emphasize the certain short-run costs over the uncertain gains from new channel configurations (Anderson *et al.*, 1997). With regard to internet channel additions, Geyskens *et al.* (2002, p. 102) stated that they can be “performance-enhancing as readily as they can be performance-destroying”. Given the uncertainty and the long-term commitments implied by the economic, social and political issues surrounding distribution channels, it is in fact “a wonder that any changes are ever made in distribution systems” (Stern *et al.*, 1993, p. 7).

Therefore, the inertia created by the complexity of the links connecting the numerous participants in a distribution system becomes unacceptable (Anderson *et al.*, 1997), and must be overcome because distribution decisions and, consequently, channel change decisions, have important implications for firm performance (Gabrielsson and Kirpalani, 2002; Lehmann and Weinberg, 2000; Zettelmeyer, 2000). However, the topic of channel change in the distribution channel literature is often treated conceptually, offering frameworks for channel change, such as the necessary steps (see, for example, Rosenbloom, 1999). Other researchers have concentrated on channel evolution at the macro (e.g. country) level (see, for example, Sharma and Dominguez, 1992). A third line of research has explored channel change at the institutional level, analyzing the evolution of retailers or wholesalers (see Withey, 1985).

A fourth line of research has dealt with the emergence of new distribution channels, particularly the internet. In this stream of research, some have considered the way in which the web transforms the interaction with consumers, comparing consumer behaviour in online and traditional stores (Alba *et al.*, 1997; Degeratu *et al.*, 2000). Others have researched how the lower search costs associated with the internet impact on prices, profits, buyer welfare, competition, and market efficiency (Lynch and Ariely, 2000; Zettelmeyer, 2000). Still others have discussed electronic markets more broadly (Benjamin and Wigand, 1995; Hoffman *et al.*, 1995).

This literature has however paid little attention to the factors that affect change in distribution channels at the micro level. Such studies are required to help managers better understand the process of channel evolution and, therefore, to design more adaptive channel structures. The literature’s focus on single channel strategies (Gabrielsson and Kirpalani, 2002; Geyskens *et al.*, 2002) has probably diverted attention from this topic, which becomes particularly pressing in the context of multiple channel strategies with the need for changes in channel tasks, resource allocation, sales goals, customer demarcations, pricing, and promotional assistance.

The model

In their review of research into channel structure, Frazier *et al.* (1990, p. 263) observed that channel integration, channel functions and channel intensity were each influenced by a myriad of consumer, market, firm, and environmental factors, concluding that “the structure of a channel of distribution is extremely complex and multifaceted”. We thereby consider in this study a set of market, environmental, and firm factors, consistent with the marketing and general strategy literatures, which point to the importance of the fit between the firm and its market and broad environment for success. These factors also cover the firm and relationship motives underlying channel inertia. The model of the hypothesized relationships is shown in Figure 1.

Main effects

Market drivers

Following Frazier *et al.* (1990), market characteristics comprise issues concerning the nature and behaviour of target customers and their response to products. Channels of distribution exist to provide benefits to consumers and it is argued must be responsive in particular to the sophistication of the company’s targeted customers and the volatility in consumer target needs. It is also argued that a product’s degree of sophistication affects consumer behaviour and hence affects the activities to be performed by distribution channels, as well as the degree of collaboration and relational links amongst channel partners (Majumdar and Ramaswamy, 1995).

Volatility in customer target needs. Volatility in customer target needs is the degree to which consumers’ needs are perceived to be marked by frequent changes (Klein *et al.*, 1990), an important cause of the evolution of distribution channels (Alba *et al.*, 1997; Guiltinan, 1974; Hoffman *et al.*, 1995; Zettelmeyer, 2000). Changes in consumers’ needs are likely to alter the bundle of service outputs sought by consumers from distribution channels (Rangan *et al.*, 1992), which influences the channel tasks to be performed, the importance of different channels, and also the governance or control of the channel system. Zettelmeyer (2000), for example, has suggested that, as internet adoption increases, it might be beneficial for firms to reduce their presence in conventional channels and build up their internet presence to facilitate consumer search.

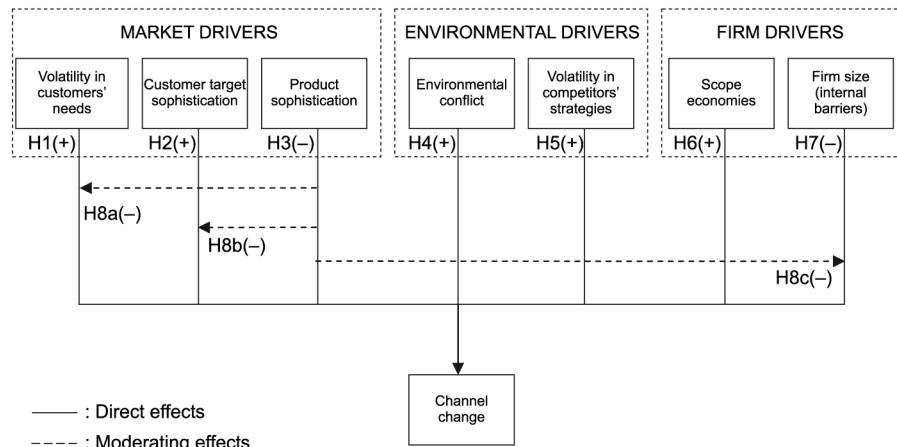


Figure 1.
Drivers of channel change:
a conceptual model

Consequently, it is expected that firms facing wider changes in customers' needs will introduce more pronounced changes in their distribution channels:

- H1.* There is a positive relationship between volatility in customers' needs and change in distribution channels.

Target customer sophistication. Customers in up-market segments have more sophisticated needs, require more service, possess more favourable attitudes towards risk and tend to be more innovative, seeking and adopting innovations earlier than others (Gatignon and Robertson, 1991; Rogers, 1995). They are more attracted by technology-intensive financial institutions (Filotto *et al.*, 1997), are more likely to adopt new consumer electronics products (Im *et al.*, 2003), are more active web users (Hoffman *et al.*, 1995), have been early adopters of internet shopping (Degeeratu *et al.*, 2000), and demand high market knowledge competences from their channels. Sophisticated consumers are thus more likely to seek and try new products, technologies and channels as soon as they are introduced and thus expect change:

- H2.* There is a positive relationship between customer target sophistication and change in distribution channels.

Product sophistication. Product sophistication is characterized by a high level of product customization, technical complexity, long-term commitment, and after-sales service (see Anderson *et al.*, 1997). Customers of sophisticated products seek a close relationship with the seller, to ensure the product meets these complex needs (Bucklin *et al.*, 1996). Consequently, selling sophisticated products requires close control over the way distribution functions are performed (Bucklin *et al.*, 1996; Majumdar and Ramaswamy, 1995; Stern and Reve, 1980), and this is more difficult to maintain in times of change. Any changes in distribution arrangements frequently bring uncertainty to channel partners regarding compensation, power, and sales potential, possibly leading to conflict and to reduced channel partner commitment (Alba *et al.*, 1997; Frazier, 1999; Gabrielsson and Kirpalani, 2002; Geyskens *et al.*, 2002; Webb and Hogan, 2002), uncertainty that is exacerbated for sophisticated products.

Also, according to transaction cost theory, sophisticated products are associated with higher degrees of asset specificity, implying higher transaction costs in contract development, bargaining, contract monitoring and enforcement, all of which increase with channel change, thereby inhibiting channel change initiatives:

- H3.* There is a negative relationship between product sophistication and change in distribution channels.

Environmental drivers

Two major sources of change are considered, the first environmental conflict, the second the role of volatility or change in competitors' strategies.

Environmental conflict. Environmental conflict is the extent to which an organization faces competition (Achrol and Stern, 1988). In a highly competitive environment companies must examine all parts of the marketing offer, including distribution (Zettelmeyer, 2000). Zettelmeyer has shown that under certain conditions, imitating competitors' moves on the internet can produce a gain in customers.

Another mechanism by which competition forces channel change is through pressure over prices and margins. Competitive environments force companies to

provide increased value through better service at lower prices (Gabrielsson and Kirpalani, 2002; Stern *et al.*, 1993), and margins can be protected by cost compression. Not surprisingly, companies look to changes in distribution to reduce physical distribution costs and to lower transaction costs (Benjamin and Wigand, 1995; Hoffman *et al.*, 1995; Geyskens *et al.*, 2002):

H4. There is a positive relationship between environmental conflict and change in distribution channels.

Volatility in competitors' strategies. Volatility in competitors' strategies, or the extent to which competitors' strategies are marked by frequent changes (Klein *et al.*, 1990), are likely to create uncertainty for an organization, including the channel strategies that will prevail. Not surprisingly, uncertainty sometimes leads an organization to imitate others, judging that others have identified with more certainty the appropriate response (Milliken, 1987). Furthermore, in a dynamic competitive environment new business patterns are likely to emerge, and this is likely to lead companies to adopt such developments including changes in channel strategies. For example, the success of Compaq's indirect sales strategy in the European personal computer industry in the 1990s led other companies also to adopt more indirect routes (Gabrielsson and Kirpalani, 2002)[1]:

H5. There is a positive relationship between volatility in competitors' strategies and change in distribution channels.

Firm drivers

According to the resource-based view of the firm, firms can be characterized as a bundle of tangible and intangible assets that (partially) determine future actions, because they define the "set of things the organisation is capable of doing confidently" (Nelson, 1991, p. 68). In this study we consider the role of scope economies and company size.

Scope economies. Scope economies express the extent to which a company can spread costs and investments over different product lines, and can be measured by the number and relatedness of product lines marketed by a company. The process of channel change can be very costly. Closing down branches and reducing the sales force can have considerable cost implications. Additionally, the process of building new channels also creates new investment needs as well as additional running costs (Geyskens *et al.*, 2002). It is clear that the redesign of channel structures can bring significant cost reductions, but these are more likely to take place in the medium to long term.

Consequently, the process of channel change is likely to require the availability of resources and the capacity to absorb additional risks, at least in the short run. The possession of scope economies can provide the resources to enable companies to invest in more complex distribution structures (Majumdar and Ramaswamy, 1995; Dutta *et al.*, 1995):

H6. There is a positive relationship between scope economies and change in distribution channels.

Company size (internal barriers). According to organizational ecology, as companies evolve and grow, structural rigidity increases, thereby precipitating greater resistance

to change, and perpetuating current organizational routines (Hannan and Freeman, 1984; Kelly and Amburgey, 1991; Singh and Lumsden, 1990). This resistance can result from a combination of internal and external drivers (Hannan and Freeman, 1977). Internally, the interests of channel coalitions, with each being responsible for a certain type of channel and commanding a certain volume of resources (Webb and Hogan, 2002), harden as firms grow, and their power becomes more institutionalized. Externally, as firms grow, these channel coalitions develop more in-depth exchange relationships in their environment that end up limiting their propensity to change. In this context, we offer the following hypothesis[2]:

- H7.* There is a negative relationship between company size (internal barriers) and change in distribution channels.

Moderating effects

It is suggested that product sophistication may moderate the positive effects that volatility in customer needs (*H1*) may have on channel change. Changing customers' needs should be positively related with channel change, because channels will have to address the new needs of customers. Increases in product sophistication, however, should decrease channel change, as consumers require a more intense interaction with distribution channels and a higher service level, which channel change may endanger. As a result, as changes in customers needs increase, the effect on channel change should reduce for more sophisticated products:

- H8a.* Product sophistication attenuates the positive relationship between volatility in customer target needs and channel change.

It is also likely that product sophistication moderates the effects of customer target sophistication on channel change (*H2*). Sophisticated consumers seek and adopt innovations in advance of other consumers, and this should constitute an important reason for introducing change in distribution channels.

However, this positive relationship should attenuate as the level of product sophistication increases, the reason being that these consumers may become concerned about the complexity of sophisticated products, requiring a closer relationship with distribution channels. Channel change puts this at risk. Thus, the following is predicted:

- H8b.* Product sophistication attenuates the positive relationship between customer target sophistication and channel change.

Product sophistication may strengthen the negative effects that company size has on channel change (*H7*). As firms grow, the resistance and political clout of the internal channel coalitions become more pervasive, thus adversely affecting channel change. In turn, highly sophisticated products require a close collaboration among channel members, building economic and social ties and creating resistance to change. Consequently, the negative relationship between company size and channel change is likely to be strengthened with increasing levels of product sophistication, because of the years that the coalitions of managers dealing with more sophisticated products have spent working towards the tightly crafted distribution arrangements required by such products. We thus offer the following:

H8c. Product sophistication strengthens the negative relationship between company size (internal barriers) and channel change.

Research method

Data collection and sample

The UK financial services industry was chosen for two main reasons. Firstly, multiple channel strategies are quite common (see Easingwood and Storey, 1996), increasing the potential for changes in distribution channels. Secondly, the pressure for change that these firms are facing is probably higher than those of any other sector. In fact, a series of inter-related developments (industry deregulation, increased consumer sophistication, technological developments, increased competitive intensity) have, apparently, led many of these companies to re-examine their distribution systems. Thus, the evidence is that financial services are a sector where change is quite marked at the distribution level, and this makes it an appropriate sector in which to implement the study. Conducting this research in sectors where channel change is less pronounced would make it more difficult to identify the mechanisms that are forcing change in distribution.

Information was collected at the product level because a company's channel strategy frequently varies from product to product. The reason is that different products have different selling propositions, satisfy different needs and are faced with different marketing environments, all of which imply that companies may have to implement different channel strategies for different products. The research focused on four product categories, mortgages, personal pensions, unit trusts and motor insurance, which were judged to provide sufficient environmental, product and channel variation. Subsequently, and based on electronic databases and the press, a pool of 160 companies with varying organizational characteristics and channel strategies was developed and contacted, with 62 (39%) key informants agreeing to be interviewed face-to-face and to complete a structured questionnaire[3]. The aim was to develop a sample representing approximately the four market sectors, although this cannot be guaranteed, as there are no databases developed on a product category basis. The distribution of the sample per product is as follows: mortgages – 17; personal pensions – 16; unit trusts – 16; and motor insurance – 12. In terms of company size, the most typical organization (38%) had between 1000 and 5000 employees.

Measure development

For the operationalization of the dependent variable, channel change, a continuous measure was developed, requiring first the establishment of a channel typology. A three channel typology was adopted:

- (1) indirect channels (i.e. intermediaries);
- (2) direct channels, traditional (i.e. branch network, direct sales force); and
- (3) direct channels, direct marketing (i.e. direct mail, telemarketing, direct response advertising and the internet).

Separating branch network from direct sales force proved to be inappropriate because companies frequently have a branch-based sales force that also visits customers at home, thus combining the two channels (see Easingwood and Coelho, 2003). Separating

the different direct marketing techniques also proved to be inappropriate, because they tend to be used at different stages of the same marketing initiative.

Data was obtained on the percentage of sales that a company obtains from each of the three channels. Respondents were asked to provide the approximate figures for this sales breakdown for the current situation and for four-five years ago. This difference was computed and converted to its logarithm to produce a non-skewed, continuous measure of channel change[4]. Therefore, our measure only captures changes in the importance of different channels, regardless of the actual absolute increase or decrease of sales per channel. Importantly, a change in the percentage of sales that firms obtain from different channels, means that the importance of each channel is changing, and this implies a redirection of company resources (whether financial or human).

For the operationalization of the independent variables we used mostly seven-point multiple-Likert scales (see Tables I and II). Target customer sophistication was measured on a scale anchored strongly disagree/strongly agree with two items developed by the authors, but that are grounded on previous research (e.g., Degeratu *et al.*, 2000; Gatignon and Robertson, 1991). It has a coefficient alpha of 0.94 and the Pearson correlation coefficient between the two items is 0.89. Product sophistication is based on the works of Anderson *et al.* (1997) and Bello and Gilliland (1997), but some items specific to financial services were introduced. It has a coefficient alpha of 0.85 and an average inter-item correlation of 0.54.

Environmental conflict was measured with four items based on the operationalizations of Jaworski and Kholi (1993) and Dwyer and Welsh (1985), and was subsequently reduced to two items, with an alpha of 0.64, which is acceptable for

Measures

Volatility in customers' needs (measure anchored no change/very frequent change)

- a. Changes in our target customers' needs for product features
- b. Changes in our target customers' needs for advice
- c. Changes in our target customers' price sensitivity

Target customer sophistication (measure anchored strongly disagree/strongly agree)

- a. Our target customer has a higher income/education
- b. Our target customer is more sophisticated on average

Product sophistication (measure based on a bipolar scale)

- a. Simple/Complex
- b. Unsophisticated/Sophisticated
- c. Risk-free/high risk
- d. Short-term commitment/Long-term commitment
- e. Little money at stake/much money at stake

Environmental conflict (measure anchored strongly disagree/strongly agree)

- a. Competition in general is very high
- b. The level of price competition is very high

Volatility in competitors' strategies (measure anchored no change/very frequent change)

- a. Changes in competitive structure (number of competitors, alliances, M&A)
 - b. Changes in competitors' channel strategies
 - c. Changes in competitors' product strategies
 - d. Changes in competitors' price strategies
-

Table I.
Description of multi-item measures

preliminary research. The Pearson correlation coefficient between the two items is 0.51. Considering that Netemeyer *et al.* (2001) suggested that inter-item correlations above 0.30 are very good, there is evidence of acceptable reliability for these measures

Volatility in customers' needs and volatility in competitors' strategies were based on the scales developed by Achrol and Stern (1988) and Klein *et al.* (1990). Each of these two measures is considered a multi-dimensional composite[5]. Scope economies was measured with an interval scale based on the number of product lines marketed by each company (Dutta *et al.*, 1995)[6] We used number of employees to measure company size (internal barriers), and this was subsequently logarithmised to reduce skewness.

Product sophistication, target customer sophistication, and environmental conflict have discriminant validity, as the correlation coefficient between any two of these scales is lower than the coefficient alpha of the variables involved. The items of these three refined scales were also subjected to a global exploratory factor analysis, and all items loaded on the appropriate factor, therefore suggesting convergent and discriminant validity.

Tables I and II provides the means, standard deviations and the correlation coefficients of the variables. The fact that the correlation coefficients between the variables in the study have no excessively large magnitudes is also evidence of discriminant validity.

Research findings and discussion

The hypotheses were tested using multiple regression (Table III). Interaction terms tend to be highly correlated with the variables that they comprise. Thus, prior to the estimation of the predicted model, the independent variables were mean-centered to reduce non-essential ill-conditioning multicollinearity (Aiken and West, 1991, p. 36) resulting from the formation of the multiplicative terms. Centering involves rescaling a variable by subtracting the mean from each value of the original variable. This procedures does not change the coefficient of the interaction, affecting only the coefficients of the individual variables involved in the interaction, which otherwise would be strongly affected by multicollinearity (see Aiken and West, 1991).

The largest variance inflation factor, 1.8, and the largest condition index, 2.9, are well below the recommended threshold of 10 and 30, respectively, indicating that there are no multicollinearity problems. White's test for heteroscedasticity was not significant ($p > 0.10$) and the assumption of normality of the residuals was verified.

Table II.
Means, standard
deviations and
correlations

	Mean	SD	1	2	3	4	5	6	7	8
1. Product sophistication	4.50	1.29								
2. Target customer sophistication	4.21	1.56	0.07							
3. Environmental conflict	6.01	1.03	-0.25	-0.04						
4. Customer volatility	4.12	1.04	0.32	0.12	0.18					
5. Competitor volatility	4.90	0.89	0.28	0.08	0.31	0.42				
6. Company size	6.81	2.10	0.05	-0.32	0.21	-0.03	-0.01			
7. Scope economies	2.77	1.61	0.14	-0.39	0.19	0.16	0.08	0.53		
8. Channel change	0.82	2.33	0.12	0.42	0.21	0.32	0.09	-0.11	0.15	

	Unstandardized coefficient	SE	<i>t</i>	Hypotheses
Constant	1.08	0.24	4.53**	
Volatility in customers' needs	0.44	0.26	1.69*	H1 (+)
Target customer sophistication	0.66	0.18	3.68**	H2 (+)
Product sophistication	0.49	0.23	2.11*	H3 (-)
Environmental conflict	0.91	0.28	3.32**	H4 (+)
Volatility in competitors' strategies	-0.66	0.31	-2.16*	H5 (+)
Scope economies	0.44	0.18	2.42**	H6 (+)
Company size (internal barriers)	-0.34	0.13	-2.58**	H7 (-)
<i>Interactions</i>				
Product sophistication × Volatility in customers' needs	-0.40	0.19	-2.08*	H8a (-)
Product sophistication × Customer target sophistication	-0.11	0.14		H8b (-)
Product sophistication × Company size (internal barriers)	-0.48	0.13		H8c (-)

Notes: * $p < 0.05$; ** $p < 0.01$; ns: not significant (one tailed tests); Overall model fit: $R^2 = 54.8\%$; Adjusted $R^2 = 45.8\%$; $F = 6.07$ ($p = 0.000$)

Table III.
Estimation results

Finally, the estimated model has an adjusted R^2 of 45.8%, which is quite acceptable and the F statistic is highly significant ($p = 0.000$).

Volatility in customer target needs, as predicted in *H1*, is positively associated with the magnitude of change in distribution channels ($b = 0.44$, $p < 0.05$). Thus, this work supports Guiltinan's (1974) contention that changing customers' needs are an important driver of change in distribution channels.

H2 is also supported, target customer sophistication having a positive impact on channel change ($b = 0.66$, $p < 0.01$), in line with research of innovative consumers, the adoption of new products, and new distribution channels (Gatignon and Robertson, 1991; Rogers, 1995; Filotto *et al.*, 1997).

Unexpectedly, however, increases in product sophistication augment the magnitude of change in distribution channels, contradicting *H3* ($b = 0.49$, $p < 0.05$). It is possible that sophisticated products are more likely to be the subject of significant product evolution requiring changes in distribution. New technologies have also enabled the development of new channels, to which sophisticated products might be more responsive, thus explaining the positive relationship. Additionally, asset specificity might not be as relevant for services as it is in other contexts (Murray and Kotabe, 1999). For instance, one executive commented:

[Intermediaries] need a brain. That is all they need. With a PC they can accomplish everything they need to do.

Therefore, these forces may have combined to produce a positive effect.

Competitive pressure has a positive impact on the magnitude of change in distribution channels (*H4*, $b = 0.91$, $p < 0.01$). Miller and Droge (1986) noted that in highly competitive environments firms must closely follow competitors' moves to survive, or, as one manager put it:

If someone finds a formula that works you can bet that within a year there are loads more, and suddenly it doesn't work as well, because everybody is doing it. So you must constantly move on.

Against predictions, this study reveals that competitor volatility restrains the magnitude of channel change ($H5$, $b = -0.66$, $p < 0.05$). There are three possible explanations. One is that companies frequently respond by focussing even harder on their specific core values, targets and channels, entrenching existing behaviour. As one manager stated:

I think we have our own language of practice and so, as long as we are on track, we are not necessarily going to jump to where competitors are.

A second explanation is that in changing competitive environments companies should focus on customers because of the difficulty of monitoring competition and the risk of generating "misperceptions of competitive structure" (Slater and Narver, 1994:50). A third explanation is that companies respond to competitor volatility at the corporate level through changes in the portfolio of brands or business units, by for instance developing specialised brands or acquiring companies or brands selling through specific channels. A manager at an intermediary based company, when questioned about responding to the introduction of direct marketing channels, stated:

No change for [the focal company], but yes for [the corporate company]. We recently acquired [a competitor], which sells direct and which we will be seeking to grow quite aggressively.

This study also shows that the issue of channel change is a matter of resources, namely of scope economies ($H6$, $b = 0.44$, $p < 0.01$), in line with findings that resources are an important issue in channel structuring decisions (e.g., Bello and Gilliland, 1997; Dutta *et al.*, 1995; Majumdar and Ramaswamy, 1995).

Conforming to predictions, the main effect indicates that larger companies introduce less change in distribution channels than smaller companies ($H7$, $b = -0.34$, $p < 0.01$). Thus, the present study provides significant support for the belief that increased company size can lead to organizational rigidities (see, for example, Hannan and Freeman, 1984; Singh and Lumsden, 1990) and that these are likely to inhibit channel change (Guiltinan, 1974; Stern *et al.*, 1993).

Finally, the moderating effects. Product sophistication was found to attenuate the positive influence of volatility in customers needs on channel change ($H8a$, $b = -0.40$, $p < 0.05$). Thus, this supports the contention that as product sophistication increases, the closer interaction with channels these products require mitigates the effects of changes in customer needs on distribution channels. Product sophistication was predicted to attenuate the effects of customer target sophistication on channel change, but no significant effect emerged ($H8b$, $b = -0.11$, $p > 0.05$). It is possible that sophisticated consumers are willing to sacrifice some of the benefits provided by a stable channel structure in order to fulfil their innovative behaviour. An alternative explanation is that sophisticated consumers, due to their education and consumer expertise, rely less on distribution channels for addressing the complexities associated with sophisticated products. Finally, product sophistication reinforces the negative effect of company size on channel change ($H8c$, $b = -0.48$, $p < 0.01$). Sophisticated products require a more carefully crafted distribution knit, and this seems to exacerbate the rigidities associated with firm size.

In summary, this work makes two contributions. Firstly, it appears to be one of the first attempts to empirically research the factors affecting the magnitude of change in distribution channels at the micro level. In fact, evidence regarding channel evolution at the firm level is sparse and usually anecdotal. Secondly, the results show that the topic is amenable to empirical investigation, and this hopefully will encourage more research.

Implications for managers

This study has not linked channel change to any success indicators. However, some observations can still be made. It does seem that when the needs of customers are changing rapidly, it is likely that the service outputs expected from the channels will also change, requiring an adjustment to the channel mix. Sophisticated customers seem to expect to find an evolving distribution system, and sophisticated products are likely to undergo significant changes, therefore requiring or perhaps enabling rearrangements in distribution.

In competitive environments firms make more changes to their distribution system, trying to protect the firm's position. However, when the strategies of competitors are changing rapidly, firms seem either to concentrate on current activities or to entertain strategic change such as acquisition.

Managers should also pay attention to the issue of resources. Scope economies seem to enable companies to introduce more change because the costs implied by such moves can be shared across several product lines. Finally, managers must also consider the potential resistance to changes in distribution, arising from the anxiety associated with the loss of predictability as well as to the changes that may occur in the budgets of internal departments, in the compensation of channel members, in career opportunities, and in the allocation of power. In addition, there are social ties between existing channel members, and cultural values may also impede change. This resistance to change will be heightened in larger organizations, where channel coalitions are more powerful.

Limitations and directions for future research

The work has one or two limitations. First of all, the sample size is relatively modest, although this has not precluded the emergence of significant results. The sample also concentrated on four financial services, which may not be representative of other non-financial services nor, particularly, of goods. Consequently, the relevance of the findings in other contexts remains to be tested.

The results may also depend on the channel typology employed. A three-channel typology was used, reflecting the reality in financial services. As a check, a two-channel typology that simply differentiated between direct and indirect channels was also employed, but the goodness of fit fell dramatically and fewer parameters were found to be significant. It seems that the more comprehensive channel typology better reflects the relatively new competitive developments in the UK financial services industry (the development of direct marketing channels).

Still considering measurement issues, this study looked only at change in the proportion of sales coming from different channels. However, change in channels is a multi-faceted phenomenon, and this should be addressed in future research. Guiltinan (1974), for example, pointed out that change can be measured in terms of channel

length, channel integration, distribution intensity, allocation of distribution tasks in the channel system, and changes in collaboration and relationships with intermediaries. Change can also be measured in terms of the degree to which human and financial resources are being reallocated among channels. With regard to environmental measures, these also need further development. The literature reveals inconsistencies in the way environmental variables are conceptualized and measured (see, for example, Klein *et al.*, 1990; Milliken, 1987).

Given the state of the art on the factors encouraging or inhibiting the process of channel change, the scope for future studies in the area is quite extensive, and goes beyond coping with the limitations of this work. It will be interesting, for example, to investigate the determinants of channel change in services versus goods, as well as in consumer versus industrial products. An additional line of research should concentrate on other variables with potential impact on channel change. Transaction cost theory has been useful to explain other distribution issues, such as channel integration, distribution intensity and channel collaboration and, therefore, is also likely to provide a useful perspective on channel change.

Looked at from the company perspective, there are factors such as changes in goals and strategy that are likely to induce change in distribution channels. Changes in the product mix, market coverage goals, segments served, desired degree of control over distribution and also on the collaboration pursued in order to leverage the resources and capabilities of the channel system are specific examples of such internal changes. Doing qualitative research at the micro level is likely to produce a significant pay-off, as it is more likely to identify causal mechanisms at work and also to identify a myriad of other factors bearing on the channel change process.

Future research can also explore the relationship between degree and type of change introduced in distribution channels and channel performance. This will provide further knowledge on the intricacies of channel change, on the attractiveness of certain changes, and will certainly help to calibrate a firm's changes in distribution channels. Finally, considering that it is generally observed that few companies successfully manage the channel change process, both qualitative and quantitative research, shedding light on how organizations conduct the process of change and the results they obtain, is likely to have high payoffs.

Notes

1. It may be argued that environmental conflict is highly correlated with volatility in competitors' strategies. However, the magnitude of the correlation is not likely to be that strong. For example, growing markets are usually associated with changes in marketing strategy, but competition is not likely to be that brisk, because the growing market provides enough resources for companies to prosper without having to aggressively fight each other. Similarly, competitive environments do not have to be characterized by strong volatility in competitors' strategies. The latter may change their prices frequently, but this does not mean that they change their strategies.
2. It may also be argued that company size reflects the availability of resources, and in fact it is likely that company size will correlate with scope economies. However, and for a number of reasons, the degree of correlation is not likely to be that strong. Many small organizations market a large number of products, and this means that they might have a significant capacity to change their distribution arrangements, as discussed above, but this would not be captured by company size. Additionally, it is well known that many small organizations

have been quite proactive lately with direct marketing, seeking to expand their geographical coverage. Alba *et al.* (1997) also note that interactive home shopping was ideal for regional retailers, because it provided them with a market expanding tool without requiring investments. Finally, there is some evidence in the popular press that many large organisations have been facing internal obstacles to downsize some of their channel operations. This is the case, for example, of some UK personal pension companies, which have delayed the reduction of their direct sales forces.

3. One of these companies, however, would end up being eliminated from the study because it did not provide complete information for measuring the dependent variable channel change.
4. The total increase in the percentage of sales that had occurred over the period across the channels used by each company was computed – obviously using this measure, one channel can only grow in importance at the expense of one or more other channels. The natural logarithm of this value was taken to reduce skewness, and this served as the dependent variable. For example, a company that had a sales breakdown of 70-30% between intermediaries and direct marketing four-five years ago, and 50-50% now, has a value on the dependent variable equal to 2.99, which corresponds to the natural logarithm of the total increase (or decrease) across channels, i.e. 20%. Consistent with econometric practice, a symbolic increase of 0.1% was given to all companies so that logarithmization could be applied to those companies reporting no change in the sales breakdown per channel during the period (and that otherwise would be impossible).
5. The two volatility measures should be considered as multi-dimensional composites, index-based scales. In other words, they are formative rather than reflective scales. With the latter, all items are supposed to measure the same construct and should, therefore, be highly correlated. In a formative, index-based measure, the constitutive items assess different parts of a construct, and for this reason are not expected to correlate significantly. In the present case, it cannot be expected that change in customers' price sensitivity must be accompanied by change in terms of advice or product features. In these circumstances, a highly complex pattern of factor loadings can emerge, and coefficient alpha becomes inappropriate to assess the psychometric properties of the measure (for a discussion of these issues see Howell, 1987; Klein *et al.*, 1990).
6. We have measured the absolute number of product lines and then rescaled it into intervals of four products because some respondents did not give very precise information (this was particularly evident with respondents from large companies). Thus, amalgamating the absolute number of product lines allows the partial removal of such bias.

References

- Achrol, R.S. and Stern, L.W. (1988), "Environmental determinants of decision-making uncertainty in marketing channels", *Journal of Marketing Research*, Vol. 25, February, pp. 36-50.
- Aiken, L.S. and West, S.G. (1991), *Multiple Regression: Testing and Interpreting Interactions*, Sage, London.
- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A. and Wood, S. (1997), "Interactive home shopping: consumer, retailer, and manufacturer incentives to participate in electronic marketplaces", *Journal of Marketing*, Vol. 61, July, pp. 38-53.
- Anderson, E., Day, G.S. and Rangan, V.K. (1997), "Strategic channel design", *Sloan Management Review*, Summer, pp. 59-69.
- Benjamin, R. and Wigand, R. (1995), "Electronic markets and virtual value chains on the information superhighway", *Sloan Management Review*, Vol. 36 No. 2, pp. 62-72.

- Bello, D.C. and Gilliland, D.I. (1997), "The effect of output controls, process controls, and flexibility on export channel performance", *Journal of Marketing*, Vol. 61, January, pp. 22-38.
- Bucklin, L.P., Ramaswamy, V. and Majumdar, S.K. (1996), "Analysing channel structures of business markets via the structure-output paradigm", *International Journal of Research in Marketing*, Vol. 13 No. 1, pp. 73-87.
- Degeratu, A.M., Rangaswamy, A. and Wu, J. (2000), "Consumer choice behavior in online and traditional supermarkets: the effects of brand name, price, and other search attributes", *International Journal of Research in Marketing*, Vol. 17 No. 1, pp. 55-78.
- Dutta, S., Bergen, M., Heide, J.B. and John, G. (1995), "Understanding dual distribution: the case of reps and house accounts", *Journal of Law, Economics, and Organisation*, Vol. 11 No. 1, pp. 189-205.
- Dwyer, R. and Welsh, M.A. (1985), "Environmental relationships of the internal political economy of marketing channels", *Journal of Marketing Research*, Vol. 22, November, pp. 397-414.
- Easingwood, C. and Coelho, F. (2003), "Single versus multiple channel strategies: typologies and drivers", *The Service Industries Journal*, Vol. 23 No. 2, pp. 31-46.
- Easingwood, C. and Storey, C. (1996), "The value of multi-channel distribution systems in the financial services sector", *The Service Industries Journal*, Vol. 16, April, pp. 223-41.
- Filotto, U., Tanzi, P.M. and Saita, F. (1997), "Customer needs and front-office technology adoption", *International Journal of Bank Marketing*, Vol. 15 No. 1, pp. 13-21.
- Frazier, G.L. (1999), "Organizing and managing channels of distribution", *Journal of the Academy of Marketing Science*, Vol. 27 No. 2, pp. 226-40.
- Frazier, G.L., Sawhney, K. and Shervani, T. (1990), "Intensity, functions, and integration in channels of distribution", in Zeithaml, V.A. (Ed.), *Review of Marketing*, American Marketing Association, Chicago, IL, pp. 262-98.
- Gabrielsson, M. and Kirpalani, V.H.M. (2002), "Multiple channel strategies in the european personal computer industry", *Journal of International Marketing*, Vol. 10 No. 3, pp. 73-95.
- Gatignon, H. and Robertson, T.S. (1991), "Innovative decision processes", in Robertson, T.S. and Kassarian, H.H. (Eds), *Handbook of Consumer Behavior*, Prentice-Hall, Englewood Cliffs, NJ, pp. 316-48.
- Geyskens, I., Gielens, K. and Dekimpe, M. (2002), "The market valuation of internet channel additions", *Journal of Marketing*, Vol. 66, April, pp. 102-19.
- Guiltinan, J.P. (1974), "Planned and evolutionary changes in distribution channels", *Journal of Retailing*, Vol. 50 No. 2, pp. 79-103.
- Hannan, M.T. and Freeman, J. (1977), "The population ecology of organizations", *American Journal of Sociology*, Vol. 82, pp. 929-64.
- Hannan, M.T. and Freeman, J. (1984), "Structural inertia and organizational change", *American Sociological Review*, Vol. 49, pp. 149-64.
- Hoffman, D.L., Novak, T.P. and Chatterjee, P. (1995), "Commercial scenarios for the Web: opportunities and challenges", *Journal of Computer Mediated Communication*, Vol. 1 No. 3, available at: <http://jcmc.indiana.edu/vol1/issue3/hoffman.html>
- Howell, R.D. (1987), "Covariance structure and measurement issues: a note on Interrelations among a channel entity's power sources", *Journal of Marketing Research*, Vol. 24, February, pp. 119-26.

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- Im, S., Bayus, B.L. and Mason, C.H. (2003), "An empirical study of innate consumer innovativeness, personal characteristics, and new-product adoption behaviour", *Journal of the Academy of Marketing Science*, Vol. 31 No. 1, pp. 61-73.
- Jaworski, B. and Kohli, A. (1993), "Marketing orientation: antecedents and consequences", *Journal of Marketing*, Vol. 57, July, pp. 53-70.
- Kelly, D. and Amburgey, T.L. (1991), "Organizational inertia and momentum: a dynamic model of strategic change", *Academy of Management Journal*, Vol. 34 No. 3, pp. 591-612.
- Klein, S., Frazier, G.L. and Roth, V.J. (1990), "A transaction cost analysis model of channel integration in international markets", *Journal of Marketing Research*, Vol. 27, May, pp. 196-208.
- Lehmann, D.R. and Weinberg, C.B. (2000), "Sales through sequential distribution channels: An application to movies and video", *Journal of Marketing*, Vol. 64, July, pp. 18-33.
- Lynch, J.G. and Ariely, D. (2000), "Wine online: search costs affect competition on price, quality, and distribution", *Marketing Science*, Vol. 19 No. 1, pp. 83-103.
- Majumdar, S.K. and Ramaswamy, V. (1995), "Going direct to market: the influence of exchange conditions", *Strategic Management Journal*, Vol. 16, pp. 353-72.
- Miller, D. and Droge, C. (1986), "Psychological and traditional determinants of structure", *Administrative Science Quarterly*, Vol. 31, December, pp. 539-60.
- Milliken, F.J. (1987), "Three types of perceived uncertainty about the environment: State, effect, and response uncertainty", *Academy of Management Review*, Vol. 12 No. 1, pp. 133-43.
- Murray, J.Y. and Kotabe, M. (1999), "Sourcing strategies of US service companies: a modified transaction-cost analysis", *Strategic Management Journal*, Vol. 20 No. 9, pp. 791-809.
- Nelson, R. (1991), "How do firms differ, and how does it matter?", *Strategic Management Journal*, Vol. 12, Winter (special issue), pp. 61-74.
- Netemeyer, R.G., Pulig, C. and Bearden, W.O. (2001), *Some Observations on Self-report Paper and Pencil Measures*, Society for Marketing Advances Distinguished Scholar Series, Elsevier, New York, NY.
- Rangan, V.K., Menezes, M.A.J. and Maier, E.P. (1992), "Channel selection for new industrial products: a framework, method, and application", *Journal of Marketing*, Vol. 56, July, pp. 69-82.
- Rogers, E.M. (1995), *Diffusion of Innovations*, Free Press, New York, NY.
- Rosenbloom, B. (1999), *Marketing Channels: A Management View*, 6th ed., Dryden Press, London.
- Sharma, A. and Dominguez, L.V. (1992), "Channel evolution: a framework for analysis", *Journal of the Academy of Marketing Science*, Vol. 20, Winter, pp. 1-15.
- Singh, J. and Lumsden, C.J. (1990), "Theory and research in organizational ecology", *Annual Review of Sociology*, Vol. 16, pp. 161-95.
- Slater, F.S. and Narver, J.C. (1994), "Does competitive environment moderate the market orientation-performance relationship?", *Journal of Marketing*, Vol. 58, January, pp. 46-55.
- Stern, L.W. and Reve, T. (1980), "Distribution channels as political economies: a framework for comparative analysis", *Journal of Marketing*, Vol. 44, Summer, pp. 52-64.
- Stern, L.W., El-Ansary, A.I. and Coughlan, A.T. (1996), *Marketing Channels*, 5th ed., Prentice Hall, London.
- Stern, L.W., Sturdivant, F.D. and Getz, G.A. (1993), "Accomplishing marketing channel change: paths and pitfalls", *European Management Journal*, Vol. 11 No. 1, pp. 1-8.

Webb, K.L. and Hogan, J.E. (2002), "Hybrid channel conflict: causes and effects on channel performance", *Journal of Business & Industrial Marketing*, Vol. 17 No. 5, pp. 338-56.

Withey, J. (1985), "Realities of channel dynamics: a wholesaling example", *Journal of the Academy of Marketing Science*, Vol. 13 No. 3, pp. 72-81.

Zettelmeyer, F. (2000), "Expanding to the internet: pricing and communications strategies when firms compete on multiple channels", *Journal of Marketing Research*, Vol. 37, August, pp. 292-308.

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