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Changing sources of competitive advantage: cognition and path dependence in the Finnish retail industry 1945–1995

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In this study, we analyze the Finnish retail industry in 1945–1995. Triangulating the major developments in society, technology, and firm-level strategic choices, we identified extensive variation in the sources of competitive advantage over time. We found that the structural and cognitive-cultural dimensions of firms that offered opportunities for success in some specific historical situations turned to be disadvantageous in other situations. We propose a research framework that parcels managerial cognition into the elements of structure, ideology, and systemic and technical properties of the firm. Especially the notion of ideology is novel in the context of path dependence and cognition.

1. Introduction

Following the early works of Veblen (1915), Hayek (1967), and the Carnegie school (March and Simon, 1958), the concept of path dependence (Arthur, 1989; David, 2001; Puffert, 2002) has received increased attention in strategic management research (for an overview, see Barnett and Burgelman, 1996; Augier and Teece, 2006). In this context, path dependence means that a firm's previous investments and its repertoire of accumulated routines constrain its future behavior (Teece *et al.*, 1997). From an evolutionary point of view (Nelson and Winter, 1982; Dosi and Malerba, 2002), path dependence is a necessary condition for resource accumulation and survival. Population ecologists even believe that established firms need relative inertia to enhance their survival opportunities (Hannan and Freeman, 1989). On the contrary, the adaptationist perspective (Child, 1972) sees path dependence as a serious threat to survival. Researchers have proposed that competitive inertia (Miller and Chen, 1994)

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or stickiness (Szulanski, 1996) prevents firms from identifying threats and opportunities in their environment, leading to organizational decline.

Originally, the causes of path dependence were sought from investments to focal technology and knowledge (David, 1986; Kenney and von Burg, 1999). The microfoundations of path dependence have, however, been largely neglected (for an overview, see Marengo *et al.*, 2000; Heffernan, 2003; Jacobides, 2006). Only recently have researchers proposed that managerial cognition may potentially explain decisions that keep firms on certain paths or create new paths. For example, Kaplan *et al.* (2003), based on their study on biotechnology industry, demonstrated that cognition at the top management level played a critical role in shaping established firms' responses to discontinuities. Furthermore, Tripsas and Gavetti (2000) demonstrated that Polaroid had acquired the needed capabilities of producing and selling digital cameras but never activated these capabilities because of the cognitive constraints of the top managers of the company. Similarly, Garud and Rappa (1994) demonstrated that technological development in the cochlear implant industry was socially constructed and that the cognitions of individual actors played a part in the institutionalization of the new technology.

The purpose of this article is to investigate how cognitions and path dependence are related in strategy and competitive advantage. We go beyond the existing literature by seeing managerial cognition as an intermediate element between the organizational actions that are realized to find a beneficial position vis-à-vis developments in the society and technology, and the structure, ideology, and the systemic properties of the firm. Thus, firms can acquire competitive advantage and survive if they perceive properly the most viable strategic path in an industry, whereas misperception (Starbuck and Mezias, 1996) or ideology (Simons and Ingram, 2003) can lead to a firm-level path that is incongruent with the development of the market. We ask how and why firms follow certain development paths and why top management either ignores or seriously misperceives environmental stimuli. Our argument is that many path-dependent phenomena can be explained by identifying the organizational structure and ideology of a firm that, consequently, fundamentally constrains the perception of the repertoire of strategies in the context of radical environmental change.

Our contributions to the literature can be listed as follows. First, we continue the emerging discussion around path dependence and cognition by offering empirical evidence about what happens in firms when the surrounding environment changes radically and thus modifies the most lucrative industry-level path. Our historical analysis of an entire industrial system over time demonstrates the need for fine-grained micro-studies in explaining why path dependence is of crucial importance in strategy. The analysis explicates the adopted strategic paths as well as the firm-level perceptions and structural constraints, thus joining the few studies that have integrated several analytical levels when studying firm evolution and path dependence (e.g., Burgelman, 1994; Siggelkow, 2001; Murmann, 2003; Catani, 2006). Second, we parcel the concept of cognition to include structural and ideological elements that essentially modify cognition and hence strategy and firm evolution. Especially the issue of ideology in the context of cognition and path dependence is novel.

We developed these ideas linking path dependence and cognition by studying the retail industry. Service industries in general and retailing in particular are important and under-researched arenas in the literature on strategic management, although they have been one of the decisive factors in the economic growth of Western societies (Chandler, 1977: 246). As the large number of retail-specific studies (e.g., Burt and Sparks, 1994) demonstrates, distribution and retailing are increasingly important in the development of postindustrial societies. Consequently, we now have a solid understanding of the basic factors affecting the performance of retail companies (e.g., Lewis and Thomas, 1990; Burt and Sparks, 1997; Athanassopoulos, 2003), their repertoire of marketing strategies (Hawes and Crittenden, 1984; Gripsrud and Gronhaug, 1985; Lal and Rao, 1997), international differences in retail business (Dawson and Burt, 1998; Colla, 2004), and, for example, the causal relationship between urbanization and the size of the retail outlets (Handy, 1993; Burt and Sparks, 1994). Furthermore, a number of case studies have resulted in knowledge on the development of retail strategies (Gupta, 1980; Mintzberg and Waters, 1982) and the antecedents of successes and failures of particular companies (Sparks, 1995; Sparks *et al.*, 2002; Wortmann, 2004).

The abovementioned pieces of retail-specific research demonstrate that retailing contains at least two characteristics that make it of interest in the context of evolutionary strategy. First, large retail firms typically are complex systems in which the different parts (retail outlets, wholesale units, corporate administration, and owners) all adapt to the changing behavior of individual consumers. Second, the relationship between the consumer behavior and the retail organization and its marketing is crucial. Indeed, why consumers choose certain types of shops is a question not only of economic efficiency but also of preference, prestige, or even ideology (e.g., in the co-operative movement). Consequently, retail markets have historically carried many types of ownership arrangements, which again affect managerial cognition and path dependence in strategy.

We proceed with the article by first reviewing the relevant literature focusing on path dependence and cognition. Second, we present the research setting and our research methodology. Third, we continue by identifying major changes in the prevailing societal and technological conditions as related to firm evolution. Fourth, we analyze the path dependence in firm strategies and offer an interpretation of the structural and cognitive antecedents of different strategic choices vis-à-vis the changes in the market conditions. Finally, we conclude our article by offering a periodization of the evolution of the Finnish retail industry with a discussion on the fit of different firm strategies relative to optimal market position in the different periods.

2. Theoretical background and research framework

Organization and management literature offers a plethora of explanations for how and why firms and industries change and how strategies evolve over time. Path dependence is one of the key concepts in evolutionary management research interested in such questions. In the context of strategic management, path dependence most often refers to a firm's previous investments and its repertoire of routines (its "history") as constraints on its future behavior (Teece *et al.*, 1997). Following David (2001), this negative definition of path dependence resembles the concept of inertia, stating that processes are unable to shake free of their history. On the contrary, the positive definition (David, 2001; Puffert, 2002)—positing that path dependence is the dependence of outcomes on the path of previous outcomes rather than simply on current conditions—has offered the needed dynamic (Barnett and Burgelman, 1996) perspective to the study of strategic management. Path dependence in strategy can thus be seen as a firm's tendency to "continue doing the same" either because they have capabilities or knowledge for some specific tasks or because they are unable to shake free from their history (cf. Winter, 2006).

The existing strategic management literature has emphasized path dependence for several reasons. First, the resource-based view and the capability literature (e.g., Barney, 1991; Teece *et al.*, 1997; Barney, 2001; Sako, 2004; Lazonick and Prencipe, 2005) see that firms need nonimitable and nonsubstitutable resources for sustained competitive advantage. As Peteraf (1993) proposed, nontradable assets develop and accumulate within the firm. This said, resources as the function of history mean that they obtain a strong tacit dimension and social complexity and are fundamentally path dependent—that is, contingent on the decisions made in the history of the firm. Historically evolved resources are not perfectly mobile and thus create possibilities for sustained competitive advantage. Second, many evolutionary scholars believe that firms are *per se* products of their history and thus strongly constrained by the imprinting conditions of the founding moments. Characteristically, Teece *et al.* (1997) argued that a firm's previous investments and its repertoire of routines fundamentally constrain its future behavior: "The notion of path dependencies recognizes that 'history matters'. Bygones are rarely bygones despite the predictions of rational actor theory."

The existing literature in the context of evolutionary economics and economic history (Nelson and Winter, 1982; Arthur, 1989; David, 2001; Puffert, 2002) has found four types of conditions that give rise to path dependence: sunk costs, technical interrelatedness, increasing returns, and dynamic increasing returns to adoption. First, as Puffert (2002) has noted, the most "trivial form" of path dependence is based on the durability of capital equipment (cf. Hannan and Freeman, 1984). In corporate strategy, this primarily means that previous investments in certain types of production facilities modify opportunities to exploit new businesses.

Second, the technical interrelatedness means that rarely are whole systems—whether technical or organizational—replaced at once. Thus, strategic management can be seen as a highly systemic effort, which again raises the probability to continue doing the same. Third, increasing returns in the context of strategy mean that firms can benefit from maintaining the level and quality of its strategy. From the perspective of the strategic apex of the firms, the adoption of new kinds of strategic activities would mean rising coordination and physical costs, whereas the continuation of "doing the same" reduces these costs. Thus, firms have a tendency not to change their strategy until a serious crisis occurs (e.g., March and Simon, 1958; Winter, 2006). Finally, the dynamic increasing returns to adoption (Arthur, 1989) mean that small (random) events, even historical accidents, lead to early fluctuations in the importance of competing procedures and techniques. Eventually, some strategy can receive a position that offers more pay-off than the competing modes and is finally "locked-in."

To summarize, *the antecedents of path dependence are usually seen to derive the systemic and technological properties of an entity*. What is more, the "entity" is usually an entire industry or technological system (cf. North, 1990). The question how and why path dependence occurs, however, becomes more complex if we consider how firm-level decision-making affects the micro-foundation of historical trajectories. Research in industrial organization (Tirole, 2001) has emphasized that for firms it is essential to identify the right time to adopt some technology (or strategy) that may obtain a dominant position in the market. This means that all industries have a hypothetical "optimal" path that offers increasing returns; firms need to find that path either as first-comers or as followers. Consequently, increased attention has been drawn to the cognitive-cultural factors explaining strategic choices and, consequently, performance outcomes in the stream of research around organizational and managerial cognition (Walsh, 1995; Tripsas and Gavetti, 2000; Porac *et al*., 2002).

Strategic choice (Child, 1972) scholars firmly believe that firm strategies are a subject of intentional decisions. A good example is Siggelkow's (2001) analysis of the rise, fall, and renaissance of Liz Claiborne. In a tranquil setting, the external and internal fit of Liz Claiborne remained stable (no change) and resulted in superior performance. Following changes in the external environment, the firm first did not change its business model (fit-conserving change) but then tried to incrementally change some elements of its internal system of design, production, and distribution (benign fit-destroying change). Finally, after continuously declining financial performance, the new management team radically changed Liz Claiborne's business model (detrimental fit-destroying change), resulting in a revitalization of the firm. Thus, the top management of the firm intentionally changed the trajectory of the firm after they had interpreted the changed market situation, with the outcome being a renewed position on a viable path.

On the contrary, many researchers interested in cognition see trajectory-changing decisions as much more complicated (Hedberg *et al*., 1976; Hinings and Greenwood, 1988; Szulanski, 1996; Miller and Toulouse, 1998). Especially the abovementioned Carnegie school tradition emphasizes the cognitive limitations of individual decision-makers. Cognition in this context refers to how actors perceive their organizational context vis-à-vis changes in the organizational environment (Simon, 1957; Cyert and March, 1963). Because decision-makers are limited in their ability to process information, they tend to focus on certain types of information (Simon, 1957). This "bounded rationality" explains why organizational actors funnel their perception according to some organizational rule setting (March and Olsen, 1989) or organizational architecture (Jacobides, 2006). The basic argument in rule-based decision-making is that actors follow procedures that they see as appropriate to the situation in which they find themselves. On the contrary, organizational architecture similarly limits the strain on individual cognition. Thus, the division of labor is a necessary precondition for decision-making as "... there is a limited number of stimuli that can be understood and evaluated" (Jacobides, 2006). *Consequently, the cognitive limitations of organizational actors may be seen as an important antecedent to path dependence among the systemic and technical issues, which are essentially filtered through managerial cognition.*

The motivational assumption underpinning the Carnegie tradition, as well as the cognitive strategy (e.g., Barr and Huff, 1992; Elsbach *et al.*, 2005), is that firms and individual managers are motivated to survive, yet they are seriously limited in their abilities to process information because of organizational structure, rules, and identity. "Staying in or finding a path" thus hinges more on the problems of perception than willingness (Starbuck and Mezias, 1996; Kaplan *et al.*, 2003; Becker *et al.*, 2006). However, in some organizations, the ideological boundaries can be a reason for firm-level path dependence. Following Jacobides (2006: 164), organizational identity offers one way to explain organizations as "... it provides a strong psychological mechanism for people to stay within organizations." Ideology differs conceptually from identity and can offer important complementary insight into understanding path dependence. In the context of political science, Mullins (1972: 510) defined ideology "... as a logically coherent system of symbols which ... links the cognitive and evaluative perception of one's social condition—especially its prospects for the future—to a program of collective action for the maintenance, alteration, or transformation of a society." This definition of ideology applies to organizations as well. In the same spirit, Simons and Ingram (1997) defined ideology as a "... set of beliefs about how the social world operates, including ideas about what outcomes are desirable and how they can be achieved."

Two elements make ideologies potentially powerful in the definition of an organization's strategic path. First, an ideologically homogenous organization collectively moves toward a direction that can be seen as following a set of deep-level beliefs among the organizational members. Second, in a hierarchical organization, some stakeholders can maintain an ideology as holders of crucial resources. Typically, political authorities can command citizens to follow a certain ideology or, in capitalist corporations, shareholders may expect the firm to fulfill expectations of, for instance, profitability and growth. Indeed, ideology and power are always closely linked (Schumpeter, 1949).

One of the most interesting aspects of ideology is that in some cases (although not always), the pursuit of economic profit and the ideology of an organization may drive the organization to separate directions (cf. North, 1990). If the ideology is a strong blueprint for action (Simons and Ingram, 1997), some firms may choose a path that is inefficient in terms of competitive success, still in conjunction with the ideological goal of the organization. Thus, *one antecedent for path dependence can be an intentional decision not to do something that would not follow the ideological blueprint.*

Combining the abovementioned approaches around path dependence, an analytically rigorous explanation of the antecedents of path dependence requires us to see the potential analytical levels (society, technology, firm/industry, and individual actors)

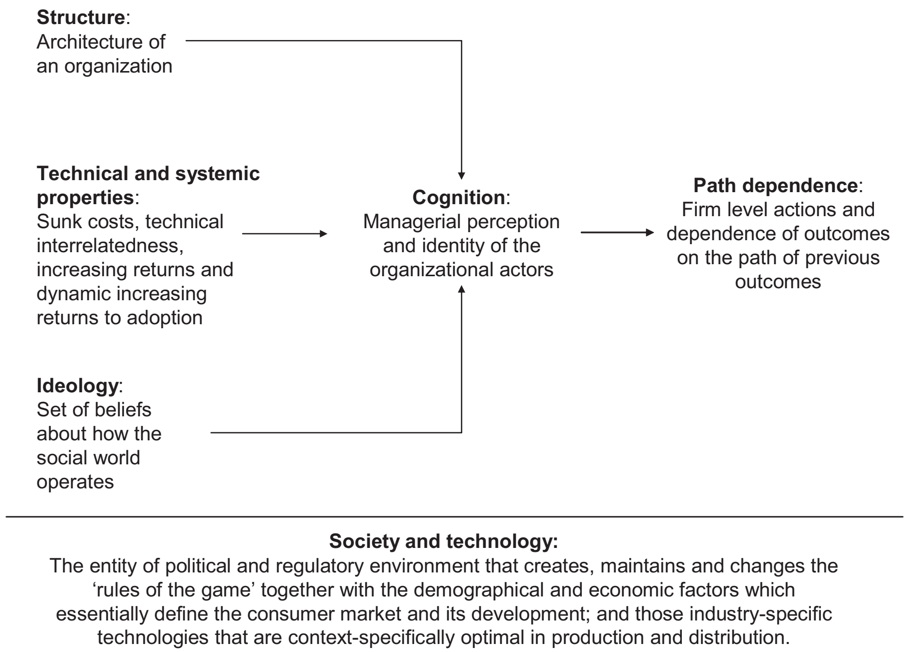

Figure 1 Research framework.

as intertwined in a complex manner in the processes that result in path dependence and, finally, in the survival and death of business organizations (Murmann, 2003). Figure 1 shows the above discussion in our research framework.

The framework is a stylized view of how and why firms are path dependent. The changes in society and technology are latent elements that create demand for certain types of "optimal" business models (cf. Tikkanen *et al.*, 2005). Path dependence in this context means the firm-level strategic behavior that fits the demands of the society and technology, but that can equally be distant or late vis-à-vis the most viable position. Thus, the explanation for path dependence—in both a positive and a negative sense—derives from managerial cognition as modified by the structure, ideology, and systemic and technical properties of the firm. In the following sections, we will identify the changes in the wider socio-economic conditions (i.e., the stimulus for change) and firm-level strategic behavior (i.e., the response and path dependence in strategy) and finally identify the intra-firm antecedents for path dependence.

3. Research site

Our research site is the Finnish retail industry, more specifically the four dominant retail organizations during the time period between 1945 and 1995. During these fifty years, the studied industry underwent a radical transformation from a highly regulated, oligopolistic setting to a deregulated and more competitive market. Based on the international comparisons (Dawson and Burt, 1998; Colla, 2004), the Finnish retail sector can be seen as an archetype of a retail market dominated by a small number of players with large retail outlets. The history and specific national features of the distribution system make the setting interesting for an evolutionary analysis. First, until Finnish membership in the European Union in 1995, the retail market was in practice closed to foreign competitive entry. Second, the aggregate market share of the four studied retail organizations accounted for more than 90% of the grocery goods market during the entire period of study. Third, competition between the four retail organizations resulted in the demise of two of the four studied organizations toward the end of the period of study. These three features mean that we are able to study the entire evolutionary process—that is, the environment that selected and the firms that fed the selection process by variation and micro-diversity in their ways of operation.

In 1945–1995, Finland went through a dramatic transformation from a rural to an urban postindustrial society (Hjerppe, 1996). In the Finnish retail industry, competition intensified acutely in the 1960s. The four major retail organizations at that time were TUKO, Kesko, SOK, and OTK/EKA. These organizations included the whole distribution chain from manufacturing (SOK; OTK/EKA) to centralized buying and marketing organizations, wholesale units, and individual retail stores. Table 1 summarizes the key characteristics of the four organizations, including the different governance structures of the distribution chains.

TUKO was owned by independent, local wholesale companies that interpreted it as a centralized distribution unit serving its owners' retail businesses. It was the wholesaler for the majority of private grocery shops in the countryside before the deregulation period in the 1960s. During the period of regulation, TUKO was the most successful company in terms of market share. After the regulatory period, the majority of the customers in rural areas and small towns were going out of business; accordingly, TUKO's wholesale owners faced decreasing demand. Also, improved transportation possibilities made the wide network of independent wholesale units unnecessary. Simultaneously, the retail business became the dominant business area instead of wholesaling. Despite these developments, the strategic focus on TUKO remained in wholesaling until the 1980s.

Kesko was owned by entrepreneurs or families who were running their own retail businesses. Kesko was clearly the most successful organization in the period of deregulation and urbanization in the 1960s–1970s. Retailers acted independently close to their customers; when the society-wide urbanization started, storeowners spontaneously either moved their activities to towns or divested their businesses.

SOK and OTK/EKA were owned and administered by local co-operatives. They were both diversified companies until the early 1980s, and OTK/EKA even until its *de facto* bankruptcy in 1992. As co-operatives, individual owners or members were an important stakeholder group for both organizations. In the mid-1970s, for instance, SOK had more than 600,000 consumers as owners, whereas OTK/EKA had more than 700,000 members.

Table 1 Organizational characteristics of Finnish retail organizations

Company/structure	Ownership structure	Strategic focus	Core structure/organizational mission	Unified brand image	Performance (cumulative operating profit 1971–1995)
TUKO Entry: 1942 Exit: 1996 (merger with Kesko; later divided to Spar and Wihuri)	Independent wholesale companies (private)	Wholesale—retail	Wholesale units owned the central unit (TUKO) and had a contractual relationship with the retail units	1973 (T)	–1228.8 (Millions of 1995 Finnish Markka)
Kesko Entry: 1941 Exit:	Independent retailers (private)	Retail	Network-based retail company; retailers owned and controlled the central organizations	1947 (K)	5932.2
SOK Entry: 1904 Exit:	Co-operative (agrarian ideology)	Retail—manufacturing industry	Agrarian co-operative. Local co-operatives controlled SOK	1910–1920 (SOK or S)	128.2
OTK (EKA from 1983 on) Entry: 1918 Exit: 1992 (to the control of banks)	Co-operative (socialist)	Manufacturing industry—retail	Conglomerate, socialistic co-operative. Local co-operatives controlled OTK. Decision-making was distributed to OTK, KK (ideological nonprofit organization), and local co-operatives	1964 (E)	–3279.2

What makes the industry interesting is the demise of two organizations (TUKO and OTK/EKA) out of the four during the period of analysis. Moreover, the focal four retail organizations dominated the retail industry totally during the period of study. Other retailers never accounted for more than 5–10% of total sales volume and are thus excluded from our analysis. However, the changes in relative market share among the four organizations during the period of study were considerable. For instance, the market share of Kesko increased from 12% to 43%, whereas TUKO declined from 56% to 21%. Kesko's dominance in market share continued until the 1990s, when it started to lose its relative market share to SOK. TUKO lost its market share gradually, with a short stable and even positive period in the 1980s. OTK/EKA was not able to increase its market share, nor did it lose it dramatically at any time. Figure 2 illustrates the development of the relative market shares of the studied organizations in the Finnish retail industry.

4. Method and data

Our empirical interest is to explore the reasons why Finnish retail firms adopted different strategies and how these choices influenced the evolution of the entire retail

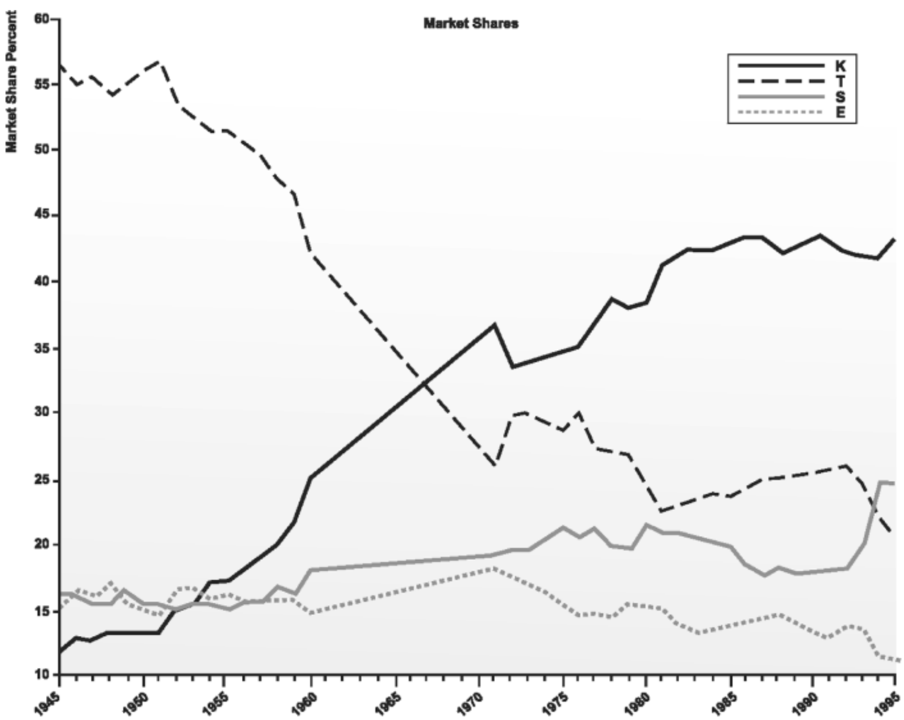

Figure 2 Market share development in the Finnish retail industry 1945–1995 (%).
Source: AC Nielsen; Hoffman, 1983.

market. A historical stance allows us to follow the logic of micro-historians who are interested in solving specific problems or mysteries by collecting "clues" that create an understanding of the real processes and their outcomes (Ginzburg, 1989). This creates valuable insights into the complex causal mechanisms between the current environmental conditions, strategy, cognition, and path dependence. In other words, this means that to produce a relevant history-specific theoretical understanding, we have to first track the type of historical processes and their interrelationships at different analytical levels from society to the firm. As typical in such historical research, the aim of such inquiry is to facilitate theorizing through a careful examination of relevant data collected from multiple sources, validated by both extant theories and ongoing re-encounters with the data.

4.1. Data

We first started our data collection by seeking information that described the social and economic history of Finland and the Finnish retail sector. This included not only published studies (Hjerppe, 1996; Lilja *et al.*, 2000) and magazine articles but also statistical data on the demographic and social development of the country. Second, we collected a variety of qualitative and quantitative materials focusing on the histories of the particular companies. We started from the annual reports, company histories, retail industry studies (Mäkinen, 1982; Home, 1989; Lehti, 1990; Peltoniemi, 1993; Mitronen, 2001; Lindblom, 2003), and articles in professional magazines and continued with extensive archival work in the TUKO, OTK, and SOK archives. The quantitative analysis of the four organizations' strategic responses and performance is based on information on their advertising, store founding, logistical solutions (emerging materials management and information systems), and market share. Market share and store-type information was compiled from AC Nielsen's monthly sales statistics and annual reports. The measures for logistical solutions included the number of warehouses (logistical hubs) and the adoption of information technology (IT). This information was collected from annual reports and company histories. For the analysis of the cognitive-structural antecedents, we collected two different sets of material. First, we conducted 15 semistructured interviews among the former CEOs and strategy planning executives, focusing on the development of the industry and the factors affecting decision-making in the companies.[1] Second, and more importantly, we collected detailed archival material covering all four companies. This extensive material included protocols of board meetings, industry analyses, correspondence, and discussion protocols of the top management meetings. This archival material lacks the retrospective bias of interview data and was central in the reconstruction of

[1]The interviews included two senior executives from SOK, four from TUKO, two from OTK, and seven from Kesko.

the decision-making criteria underpinning strategic behavior. Table A1 summarizes the used variables and sources.

4.2. Analysis

We started our analysis by writing an historical description of the overall development of the Finnish retail industry. This was followed by four case studies, each describing the history of one particular retail company. For these historical accounts, we sorted the facts into event history databases that we complemented with statistical material from advertisements, store types, logistical solutions, and market share.

In the descriptive quantitative analysis, we studied how the case organizations reacted to major environmental changes in their marketing strategies. We focused on advertising, store types, and logistical solutions, because they reflect the organizations' ability to change their behavior in different competitive contexts. It can be argued that these variables essentially contain information on all key aspects of an organization's marketing strategy (McCarthy, 1960; Lal and Rao, 1997): products, prices, promotion activities, and distribution channels (including logistical solutions). When making these decisions, we consulted industry specialists and executives who confirmed our understanding of the industry logic and the relevant metrics to study path dependence in the specific industry in question. Following the advice of industry specialists, we omitted the product and price variables because, throughout our period of analysis, all four organizations offered a practically identical product mix for comparable prices in the consumer goods segment (see also Aalto-Setälä *et al.*, 1995). Finally, we engaged in qualitative, interpretative work when analyzing the cognitive and ideological reasoning of the firms' strategic decisions. As typical in such interpretative work, we analyzed the material several times as new theoretical ideas emerged that were related to comments of the interviewed industry specialists. Thus, the qualitative part of our analysis was a highly iterative process between the data and our theoretical framework.

5. Historical analysis

5.1. Changes in the socio-technological conditions

Based on both our historical study and the retail studies conducted in other countries (e.g., Sparks, 1993; Burt and Sparks, 1994), we were able to identify three issues in the organizational environment that seemingly affected the evolution of the Finnish retail industry. First, the business-to-consumer nature of the grocery trade made it inherently contingent on major changes at the societal level (Hjerppe, 1996). The demographic structure, standard of living, and consumption culture can be seen as the key variables affecting the consumer market and thus the competitive setting of the industry after the postwar era (Home, 1989). Second, the economic policy and regulation of the government shaped the industry especially during the war (1939–1945), and to a lessening extent until the 1980s (Pihkala, 1982). Third, technological development made it possible to serve new consumer segments, such as suburban consumers, with supermarkets and hypermarkets, but also created entirely new business models in terms of novel logistical solutions and, finally, advanced information systems (Mitronen, 2001; Lindblom, 2003).

Figure 3 illustrates some of the major changes in the retail industry environment between 1945 and 1995 in terms of the number of automobiles, urbanization rate, number of computers, and the volume of retail trade (the base year of the index is 1980). From the perspective of the retail firms, the two most dramatic ruptures were the regulation of the retail trade in 1941 and the deregulation in 1964 (Hoffman, 1990; Herranen, 2004). In 1941, the Finnish government organized the wholesale companies to carry out the wartime distribution of rationed consumer products (Pihkala, 1982). At this point, TUKO and Kesko were founded to represent the interests of private wholesalers and grocery stores in the rationing "pool" (Hoffman, 1983), whereas the two co-operatives were already suitable for such a centralized distribution system (Herranen, 2004). The regulative system as a whole affected a range of business activities,

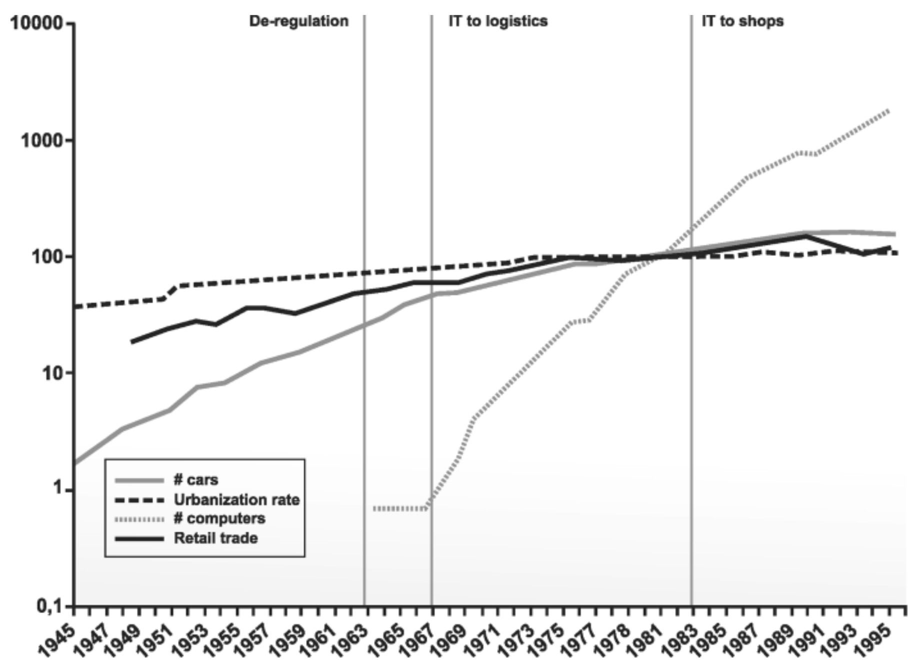

Figure 3 Development trends in the major factors affecting the Finnish retail market 1945–1995. 1980 = 100.

Sources: Official Statistics of Finland (SVT) 1945–1995; Statistical yearbook 2005; Consumer survey, 1980, 1985, 2005.

not only in retailing but equally in the finance sector, manufacturing, and foreign trade (Lilja *et al*., 2000). The liberalization of the business took place gradually in the 1950s. When retailing was deregulated in 1964, it was one of the last heritages of the wartime economic policies (Pihkala, 1982). At this point, the firms were allowed to adjust their prices in a competitive manner and also to use prices in their advertising (Herranen, 2004). The deregulation in 1964, however, partially reflected four developments that already had happened in the social and economic structure of the country.

First, Finnish society had increasingly urbanized after World War II. In 1945, 22% of the population lived in urban areas, but in the late 1960s, this figure had increased to 50%. The fast urbanization rate, especially in the 1960s and 1970s, also meant the emergence of large-scale suburbanization, as almost all of the new housing opportunities were built outside the city centers (Hjerppe, 1996).

Second, new urban consumers were increasingly wealthy and demanded more services (Home, 1989). The GDP per capita nearly doubled between 1950 and 1969. The development of retail trade was even more dramatic, as its volume tripled during the same period. In 1995, the volume of retail trade was eight times higher than it had been fifty years earlier.

Third, rapid motorization was faced in the 1960s, as distances in urban areas grew substantially because of the emergence of new suburbs. The dramatic increase in the number of cars also reflects the deregulation of imports and the improved infrastructure in terms of a better road system.

Fourth, starting in the late 1960s, the entire society was linked to the development of IT. Figure 2 also illustrates this development. In the 1960s, IT was utilized mainly in the manufacturing industries and in warehousing systems. A final step was the first network solutions, which facilitated, for example, controlling entire distribution-chain systems (Pohjola, 2003). Essentially, developments in IT, including the standards in bar coding and point-of-sales terminals, potentially raised the productivity of retail trade in the 1980s–1990s. For example, when the first point-of-sales terminals were launched in the early 1980s, the companies had the opportunity to analyze the turnover of different products. Indeed, one of the senior executives of TUKO described the adoption of the point-of-sales terminals as a “total shock”, meaning that previously the top management of the company actually did not know the exact nature of the trade. These developments in the IT led to a dramatic decrease in the number of products (assortment) and, most importantly, in the turnover rate of that assortment. In Figure 3, we can also identify the use of IT in logistics and in the management of retail outlets as technological ruptures that significantly affected the strategic development of the retail firms.

5.2. Firm-level strategic behavior

The Finnish retail sector followed two partly separate development paths before World War II. On the one hand, during the 1920s and the 1930s, the two co-operatives, SOK and OTK/EKA, diversified both upstream and downstream from their original wholesale and retail businesses (Herranen, 2004; Kallenautio, 1992). On the other hand, various private local retail and wholesale companies started to build supportive central organizations (later Kesko and TUKO) as a response against SOK and OTK/EKA's strengthening market position (Hoffman, 1983). This development materialized in 1941 and 1942 in the foundation of TUKO and Kesko.

Societal changes during the 1960s and 1980s radically changed the competitive environment of the wholesale and retail companies. Urban consumers, with changed consumption behavior and with the possibility to use their own cars in transportation, started to shift the focus to the need for more efficient logistics and distribution systems with a more attractive assortment of products. In retail trade, the growth of the average size of the stores was the most visible sign of the changing managerial logic and technology (e.g., Herranen, 2004). Indeed, the popularity of automobiles motivated the grocery retail companies to enlarge the size of their stores, but equally the bigger and more attractive outlets fed the need for automobiles (cf. Handy, 1993).

Considering the store portfolios, companies had to first establish local self-service stores, and then subsequently bigger supermarkets, and then finally hypermarkets in the late 1980s. Simultaneously, newspaper advertising received increased attention in the organizations' strategic management, because the oligopolistic competitive situation, together with suburban supermarkets and extra-urban hypermarkets, emphasized the role of advertising as one of the primary elements of the marketing mix. Figures 4 and 5 illustrate the major changes in the store portfolio and advertising, with the first mentioned including only the self-service shops.

The store concepts (self-service, supermarket, and hypermarket) meant considerable technological changes that affected most directly the daily routines of the individual consumers. None of these concepts were innovated in Finland; they were adopted directly from other European countries (e.g., Hoffman, 1983). The first new store type after the traditional service shop was the small self-service outlet. The number of such outlets expanded rapidly in the 1960s but turned downward already in the beginning of the 1970s. All companies showed a uniform pattern in the launching of the self-service concept except SOK, which was modestly slower than its competitors. On the contrary, OTK/EKA diluted its resources both in small grocery shops and in nongrocery retailing. However, the closing of the small shops created variation among the companies. Kesko was clearly the slowest to decrease the number of its small stores. SOK, on the contrary, phased out the majority of its small shops during a very short period in the latter part of the 1980s. Overall, however, all companies adapted to the changes in the society in an almost identical manner (deregulation and urbanization) and with an identical technology (the small self-service shop).

The next major technological change was the coming of the medium-size retail outlet. These supermarkets served a larger group of customers than small shops, which were typically located in city centers and rural areas. On the contrary, supermarkets operated in the newly built suburban areas. The investments and disinvestments in the supermarket sector show considerable differences among the four

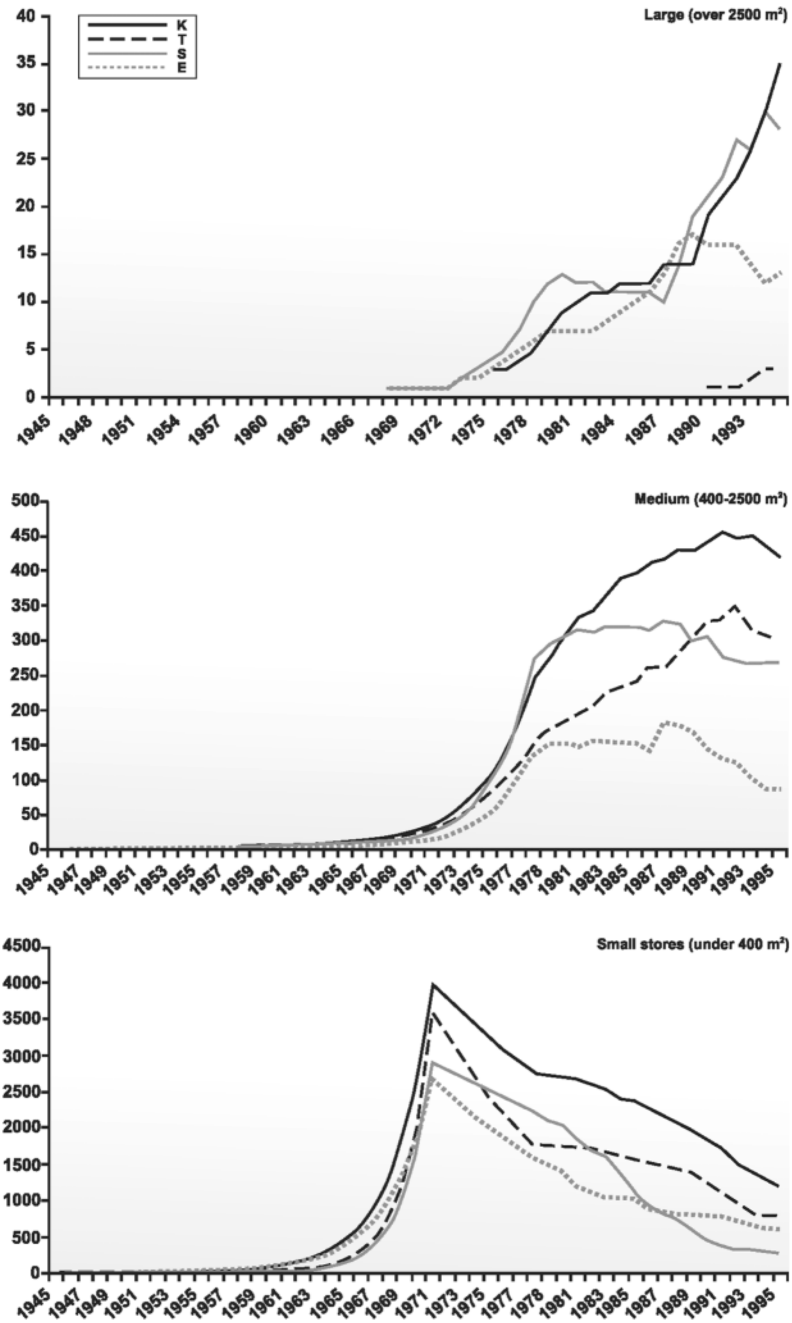

Figure 4 Large, medium, and small stores in the Finnish retail industry, 1945–1995.
Source: AC Nielsen.

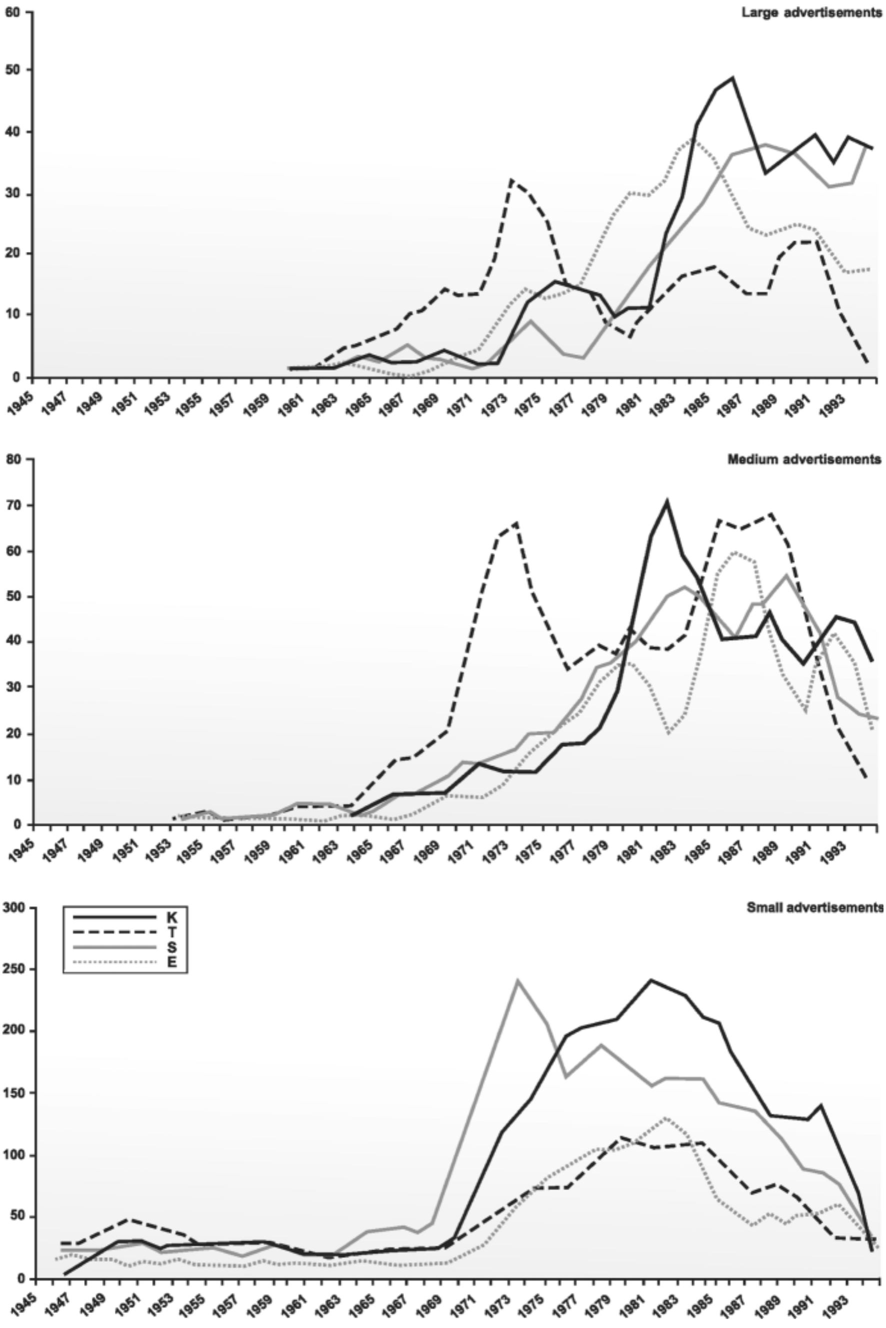

Figure 5 Volume of advertising in the Finnish retail trade, 1945–1995.
Source: Finnish grocery advertisement database.

companies. Kesko and SOK started at the same pace in the 1970s. However, SOK started to close down its supermarket chain in the early 1980s, whereas Kesko continued to emphasize this shop type. OTK/EKA and TUKO started to invest in supermarkets later than Kesko and SOK. OTK/EKA was also eager to decrease the number of its supermarkets relatively soon. TUKO, on the contrary, continued to expand its supermarket chain until the years of the economic depression in the early 1990s.

The hypermarket-size outlets, however, marked the biggest difference between TUKO and the other companies. Hypermarkets required a totally different consumer market in terms of increased purchasing power and an advanced transportation system. Especially SOK and Kesko utilized hypermarkets to a large extent in their business model. Until the late 1980s, OTK/EKA also followed this development trend being also the owner of the Finland's first hypermarket in Espoo. On the contrary, TUKO was the only company that in practice never adopted the hypermarket concept. In a sense, TUKO's increased activity in the supermarket segment in the 1980s can be seen as a reflection of its passivity in the hypermarket competition, which eventually turned to be decisive in selecting the market winners and losers in the early 1990s.

Another dimension in the strategic adaptation of the individual firms was advertising in daily newspapers. Such advertising became crucial in the mid-1960s and especially in the 1970s, when competition for consumers was at its peak. Prices *per se* were almost identical in each firm (Aalto-Setälä *et al.*, 1995), yet they were used to attract customers in their daily or weekly shopping decisions. In TUKO, for example, advertising was seen as the "heavy artillery of the army" (i.e., of the shop portfolio). Some products such as coffee were constantly sold under the net price, and overall, the aggressiveness of competition crystallized in large-scale advertising campaigns.

Logically, small outlets used small advertisements; the larger the shop the more it needed publicity to reach consumers from even relatively distant areas. Whereas investments in different store concepts affected the market situation only over a longer time period, advertising was clearly seen as a tactical "weapon" in the short-term competitive setting (e.g., Heinonen, 1980). From this perspective, TUKO's advertising behavior constitutes a very interesting history. In the smallest advertisement size, TUKO outlets advertised on a par with their large number of small shops. However, in the larger advertisement sizes, its behavior was much less consistent when compared with its key competitors. It seems likely that TUKO used advertising not in relation to its shop portfolio (cf. Mason and Mayer, 1987) but rather to complement its competitive weakness in the hypermarket segment where it had no presence.

From the perspective of the performance of the companies, the development in the upstream activities (purchasing and logistical solutions) was as important as the distribution channel. In practice, all upstream changes were catalyzed by innovations in IT and improvements in the Finnish transportation infrastructure. The first upstream improvement was the creation of logistical hubs, which essentially centralized the distribution of products and thus raised the overall productivity of the distribution channel (Hoffman, 1983; Kallenautio, 1992; Herranen, 2004). In this respect, all the companies were rather equal, as Kesko, SOK, and OTK/EKA built their hubs during the 1960s. TUKO, on the contrary, built its first hub only in 1976. Respectively, the first IT solutions were utilized in the context of these hubs (e.g., Kallenautio, 1992; Herranen, 2004). The second upstream development was the radical decrease in the number of local logistical centers. OTK/EKA integrated its local co-operatives into one distribution unit in 1983, and SOK integrated almost 200 local units into 35 units in 1984. Simultaneously, between 1982 and 1990, Kesko closed eight local distribution units. Again, TUKO was the slowest organization to change its structure, primarily because the local wholesale units were independent organizations that were closed only because of severe financial problems. Thus, the number of TUKO's distribution units decreased slowly and in a more hazardous manner than in the other organizations. One of the interviewed TUKO executives described the situation as "nursing a fundamentally sick patient . . . we used most of our time in the 1980s by fusing close-to-bankruptcy wholesale companies into the organization of TUKO." Conversely, TUKO was among the first that started to coordinate its material flows by launching point-of-sales terminals in the early 1980s. OTK/EKA and SOK soon followed, and in the early 1990s, OTK/EKA was recognized as the most efficient organization in terms of its material flows (turnover rate and the size of the assortment). However, when Kesko tried to follow its competitors in the late 1980s, its independent retailers literally refused to launch point-of-sales terminals. The fear was that by allowing Kesko to control the material flows, the retailers would lose their direct contact and thus their bargaining opportunities with the suppliers. The conflict between Kesko and its retailers continued until the mid-1990s. As a consequence, toward the end of our research period, Kesko had up to 30% more items in its assortment and much less bargaining power with suppliers than its competitors (interviews with present and former Kesko executives). Indeed, when SOK, for example, negotiated prices with suppliers, it acted as one homogenous organization, whereas in Kesko the bargaining was diluted into all levels of the organization (retail stores, local logistical centers, and the central organization).

To conclude, in terms of the logistical and IT solutions, we can identify significant differences in how the four companies adapted to the societal and technological changes surrounding them. First, TUKO was both slower and less consistent in the rationalization of its logistical chain. Second, Kesko was the last organization to adopt point-of-sales terminals. This meant that it was unable to rationalize its assortment and ultimately its brand image at the same pace as its competitors.

6. Antecedents of path dependence: structure, cognition, and ideology

The transformation period from regulation to a deregulated market affected the four retail organizations differently. Some of them were, for instance, eager to start competing with price already before the liberalization of trade. On the contrary, others were slower in reducing the number of wholesale units and logistical centers. These separate incidents, indeed, reflect the fact that the organizations were entirely different in terms of their evolutionary paths.

6.1. *Kesko—the flexible winner*

With hindsight, Kesko's success between the 1960s and the 1980s is rather easy to explain through its organizational structure, governance system, and abundant financial and managerial resources. Of the four companies, Kesko was clearly able to exploit the opportunity window of deregulation, because it had the most flexible organization structure. First, it was a combination of independent retailers with a light central administrative body. Thus, its structure had many similarities with currently popular network-based organizational structures, which have been argued to be more able to create radical innovations than tightly coupled systems (Nooteboom, 1999). Second, individual retailers had a strong economic incentive to be flexible. They acted as entrepreneurs and owned the central organization. In Kesko's organization, the entrepreneurs also held many representative positions and practically controlled strategic decision-making. Thus, the company was never organized as a strict bureaucratic model, with rules and procedures leading to rule-following behavior. Third, owing to the influence of the retailers that owned the company, Kesko never adopted the culture of a traditional wholesale organization. Consequently, among the four competitors, it had the best possibility to exploit the market trend that strongly emphasized mass-retailing over wholesaling. The strong retail arm of the organization also guaranteed Kesko a close link to its customers and their changing needs. Kesko was also the second company to operate under one specific brand image, as it launched the "K" brand already in 1947.

On the whole, Kesko clearly was the most flexible retail organization in Finland during the first two decades after the deregulation. The company was able to successfully exploit its opportunities for strategic adaptation during the major societal and technological changes, especially during the era of deregulation in the 1960s. During this formative moment, it systematically analyzed the market situation in over 30 of the largest urban areas in Finland, founded a special organization to carry the responsibility of new outlets, and facilitated the founding of over 500 self-service shops during 1964. Thus, its survival in the changing retail industry in the 1960s was a logical consequence of its ability to adapt to the changing environment by choosing a trajectory that offered a positive result for over two decades.

On the contrary, the rapid environmental selection that favored a flexible, entrepreneurial, and market-oriented organization such as Kesko in the 1960s and 1970s turned to be a disadvantage in the 1980s, when the need to centralize logistics and marketing became crucial because of the development in logistics and IT systems. At this point, the decentralized and entrepreneurial culture of the firm slowed Kesko down; it was unable to change its direction until ten years after the two co-operatives. Indeed, at this phase of the evolution, the independent retailers that had made possible the fast growth in the 1960s turned to be an obstacle for the more centralized mode of business:

> . . . leading retailers made sure that Kesko was not allowed to make decisions that would have risked their autonomy . . . retailers' main interest is their own interest and cash flow . . . they do not care if the entire group is successful or not. (Former Kesko top executive)

It is also evident that the historical success of Kesko created a feeling of overconfidence among the top management of Kesko:

> . . . the new business model of the S-group was badly misunderstood . . . there was no realism in the beliefs of our own competencies.
>
> Only few managers were interested in the international trends in retailing. Even language skills were not sufficient to follow the development in retailing. (Former Kesko top executive)

6.2. SOK—the turnaround master

SOK as an organization was rather ill-equipped to adapt to the changing business environment before the 1980s. Its organization manifested strong inert properties. It was a diversified organization with high sunk costs in its distribution and production system. Moreover, urbanization did not favor its original strategic orientation toward extra-urban townships. As an organization, SOK had a traditional bureaucratic organizational structure with defined rules and procedures.

As late as in 1958, SOK's top management still felt that self-service shops would never be important in the Finnish retail market (Herranen, 2004). The problem of this misperception was multiplied as the operational decisions to close or found new grocery outlets were made by the small local co-operatives and their administration. In the early 1960s, the local managers typically perceived performance problems as temporary phenomena:

> [reports on poorly performed shops for 1959] show that for all cases of declining sales volume we can find good and acceptable causes or local circumstances. . . . (External Board of co-operative Suur-Savo, February 4, 1960)

It is characteristic that, for example, local S-co-operatives acquired outlets from individual private shop-owners when they sold their rural outlets:

> We bought a shop building in the Tuhkala village from a private shop-owner. (External Board of co-operative Suur-Savo, April 30, 1963)

Also, the S-group in general and the local co-operatives in particular tested different kinds of new concepts to compensate for declining sales. Downtown department stores were one such answer to new business environment and had the longest impact on business operations, whereas others—like buses selling clothing in rural areas—were dissolved after a short period. Perhaps the most important problem was, however, the ideological necessity to maintain the small rural shops. Indeed, the local administration found it sometimes impossible to close shops even under severe economic pressure:

> . . . we sure have poorly selling outlets. Dissolving them would be of utmost importance, but it is very difficult from the perspective of the management. We must find a means to keep these small local shops alive. (Meeting of Suur-Savo shopkeepers, December 29, 1963)

Most often, the managerial solution was to wait until the outlets literally broke down or the shopkeepers retired:

> . . . what are the future options of small outlets, especially after the condition of the buildings gets worse or . . . the question of new shopkeepers becomes too difficult to handle . . . . (External Board of co-operative Suur-Savo, December 2, 1965)

On the contrary, SOK managed to implement a substantial corporate turnaround in the 1980s. This process completely changed the trajectory of the organization and established it as a winner in the retail industry in the late 1980s and in the 1990s. The turnaround had identifiable antecedents and consequences. First, although the early period of urbanization and deregulation was difficult, the management of S-group understood already in the mid-1960s that the business environment had dramatically changed:

> Modern customers do not like waiting . . . the demands and shopping habits of people are changing. Our competitors have improved their position and we must follow. (CEO, April 13, 1965)

Another important antecedent for survival was the fact that SOK forcefully "urbanized" itself by merging its co-operatives into a smaller number of powerful units. Despite the fact that, from the viewpoint of environmental selection, SOK was in a very unfavorable situation before its turnaround, the organization adapted forcefully in the 1980s and was able to survive in the changing business environment. During the 1980s, SOK made a significant strategic turnaround by moving its operations to urban areas and by simultaneously concentrating on efficient logistics and large distribution units supported by the newest IT solutions. SOK has been a top performer since the early 1990s with a hypermarket-based store structure and an aggressive advertising strategy. It is interesting to note that SOK's turnaround from a rural conglomerate to an efficient domestic retailer was a surprise for its competitors. The top executives of both TUKO and Kesko had been looking forward to SOK's bankruptcy during the 1980s. Retrospectively, however, the centralized decision-making system together with independent local operations that had slowed adaptation down in the 1960s turned to be an advantage when the capabilities concerning IT and more disciplined assortment management became crucial in the 1980s.

6.3. *OTK/EKA—the ideological loser*

Among the four large retail organizations, OTK/EKA probably had the most problematic organizational structure and ideological mission to change its strategic trajectory. As a diversified conglomerate with its own manufacturing, sunk costs related to the operations were high. What is more, the decision-making over retail-specific investments was dispersed over various parts of the organization. Owing to the fact that the entire company was established based on a socialist ideology to serve working-class customers, its strategic options were limited. OTK/EKA's often politically active (leftist) members were not tolerant toward rationalization attempts by the management of the company. In fact, most of the necessary managerial responses were perceived to be against the socialistic ideas and principles that were the hard ideological core of OTK/EKA as an organization. As the CEO of OTK stated in 1968, "OTK operates under both economic and ideological pressure." Thus, both internal and external obstacles to strategic adaptation were high. All in all, OTK/EKA's demise in the early 1990s can be explained to a considerable extent by the existence of strong inert forces in the organization.

When we interpret OTK/EKA's problems in a more detailed manner, it is clear that it failed to seize the opportunity of deregulation for various reasons. First, in the 1960s, it tried to gain competitive advantage in nongrocery retailing, which retrospectively ate its resources in the grocery retailing. During the formative period of the early 1960s, it allocated the majority of its resources to nongrocery business. For example, in 1965–1967, it started 67 supermarket-size textile shops, together with numerous downtown department stores and shoe shops. In 1959–1964, only 22% of all investments were targeted to the grocery business, whereas this sector still comprised over 40% of sales and net result. The easiest explanation for this failure in the early 1960s would be to see it as managerial misperception. Indeed, the CEO of OTK stated in 1961 that:

> . . . we have noticed that we have problems in our marketing system . . . OTK is starting to emphasize the clothing business.

In the OTK case, however, structure and ideology together can be seen as the primary cause for the overreaching misperception among the OTK top management team members. First, decisions concerning the grocery business were made not only in OTK but also in the KK association (the ideological sister organization of OTK; later integrated to OTK) and local co-operatives. As the CEO of OTK explained after the early failure:

> It is extremely hard to develop the grocery sector as long as the current organizational design remains. The OTK board of directors cannot take full responsibility for the failures.

In a sense, the OTK top management team focused on activities in which it had the largest independence and ignored the complex grocery sector. For example, OTK operated a full-scale improvement in the logistical chain, including modern logistical hubs and IT solutions, which, however, was rather useless in the short run as the underdeveloped retail outlets were unable to distribute the packed grocery items:

> Retail outlets are unable to use the services of the logistical hubs . . . full service shops need the same workforce despite the developments of the logistical chain.

It is also notable that OTK was well aware of the international trends in retailing; top managers visited regularly other European countries and the United States to gather intelligence on the more developed retail markets. After one such trip, the director of the retail operations explained how "one logistical hub can serve as many as 600 supermarkets." Thus, the organizational structure created a situation in which no one took full responsibility for the development of the focal business sector. It is, however, clear that the more strategic issues should have been the responsibility of OTK's top management, as the local co-operatives were both tightly linked with their local problems ("we should rebuild both sauna and warehouse") and pressured by the consumer-owners (". . . it is not an easy task to close an outlet that has functioned 55 years . . . the sales do not cover even salaries."). OTK was almost ten years late in its response vis-à-vis Kesko.

Second, OTK suffered from its own manufacturing activities. Some of its products (butter and bread, for instance) required service and were not suitable for a self-service distribution channel. A more serious problem was the perceived low brand image of OTK/EKA's own products (Kallenautio, 1992). Here, again, the ideological nature of the organization made it impossible to seek any radical changes. Indeed, during the problematic transformation period, OTK decided to prioritize its own products:

> Our wholesale staff used to buy from all manufacturers who cared to made offers. We bought sausages from competitors if the price was 20 or 30 percent lower. Now we do not buy from elsewhere.

As a consequence, in the late 1960s, OTK had already lost the competition for grocery markets. Directors of the grocery business summarized the situation in 1969 in the following manner:

> . . . we have constantly lost market share . . . the situation is very worrying . . . we have not systematically developed this crucial business segment. I am scared
>
> Our grocery shops look and feel cheap . . . I have often thought that we are fooling around . . . there is no direction for what we should do . . .

OTK/EKA's strategic problems continued in the 1970s and 1980s: compromises in strategies, the emphasis on its own production, and political tension between its top executives and local co-operatives "sanded the edges" of re-organization attempts.

6.4. TUKO—the market leader that faded away

TUKO's greatest problem was its strong history in wholesaling, which made it virtually impossible for the company to adapt to the changing business environment. Consequently, an internal consensus for strategic changes could never be established. Ideological and social constraints were also a problem. The social aspect was most crucial in small rural townships, in which the wholesalers played an important role not only as businessmen but also as members of the community. In those circumstances, exit from the traditional business was not an easy or purely economic task. Moreover, TUKO had a strongly politicized organization, which also was rather bureaucratic and procedural. On the contrary, responsibilities between the central organization and regional units were not adequately specified, which further enhanced politicking. In sum, TUKO's death in 1995 can be significantly explained by the existence of strong negative cognitive-cultural elements in the organization, most notably the strong ideological lock-in in wholesaling and the consequent inappropriateness of its key strategic responses. These "bitter fruits" of the organizational structure were well known in TUKO but without any clear solution:

> . . . those latent problems [in shop-portfolio and organizational structure] that we have known for long time have now materialized and the 'bitter fruits' are now cherished. (CEO, September 2, 1976)
>
> . . . it cannot be demanded that one wholesale firm could be as rational as centrally managed Kesko . . . if we accept this it would mean the termination of all wholesale owners of TUKO. (Board member, September 2, 1976)

TUKO's biggest and more practical problem was the high mortality rate among country stores and small urban service stores—a logical consequence of the demographic changes of Finnish society. This made the position of many smaller wholesalers problematic. However, they were usually not willing to exit before actual bankruptcy and attempted to keep the entire set of grocery shops alive:

> Although we know that many of our grocery shops will not survive for long, we must support them. We must help them believe in the future even if that future might be a very short one . . . our own existence and results are dependent on them (i.e. small grocery shops). (The minutes of T marketing day, September 26, 1976)

Indeed, these slowly dying wholesale companies demanded both financial and managerial resources from TUKO's central organization. In addition to the problems in wholesaling, TUKO's grocery business was until 1973 divided into three distinct chains (A&O, Spar, and T&R) and into "wild" stores that had contractual relations with wholesalers but usually no marketing co-operation. Hence, the TUKO group invested heavily in advertising (e.g., almost 50% of all advertising volume in 1970), but the market share effects were rather modest because of the fragmented brand image. Simultaneously, the collective mentality of the group became negative in the late 1970s:

> Should we accept the fact that our opportunities to make profits are clearly weaker than in competing organizations?
>
> For many years we have been in a situation in which we do not understand what is happening.
>
> . . . problems are very serious . . . our market share is shrinking . . . which is the result of weaknesses in founding new retail outlets and overall backwardness in our shop-portfolio. (The minutes of T marketing day, September 2, 1976)

In 1980, TUKO's inability to channel resources to new hypermarkets and related large-scale advertising made it both an underadvertiser and an underaverage store builder in comparison with the other three organizations. In the early 1990s, TUKO's competitive and economic position was so seriously weakened that it no longer had any possibility to challenge Kesko or SOK. However, until the bitter end, the major shareowners of TUKO maintained their belief in the old organizational structure as a combination of the TUKO Corporation, wholesalers, and retailers:

> Regardless on how the figure (i.e. organizational structure) is viewed, the result is always the same: wholesaling is in the middle; there cannot be a direct link between TUKO and the retail units. (Board of Directors, August 25, 1988).

7. Discussion

When simultaneously observing the levels of society and technology, on the one hand, and the firm, on the other hand, we were able to identify clear patterns of development that divide the entire study period into three phases. The first phase was during the period of regulation that started at the beginning of World War II and continued until the mid-1960s. The second phase was the period of deregulation that started in the mid-1960s. This lasted until the third, intensified competition phase began in the early 1980s. All three periods were characteristically different. They clearly required different capabilities at the level of the firm. Table 2 summarizes the most important attributes related to each period.

As a summary of the main findings of our study, Table 2 also demonstrates the ephemeral nature of competitive advantage. TUKO, for example, dominated the regulated era but was totally unprepared for and totally unable to change its strategy and business model during the latter part of the twentieth century. On the contrary, Kesko took the dominant position in the 1960s and 1970s by adapting quickly to the changing societal and technological environment, yet it was unable to modernize its logistics

Table 2 Evolution of society, technology, and retail firms

Period	Society	Technology	Required capabilities	Dominating firm(s)	Expanding firm
Regulation (1945–1964)	Regulated environment with a still rural population	Small service shops; practically no advertising; small local wholesale unit; no IT	Wide network of wholesale units; deep involvement in the regulatory system	TUKO	Kesko
Deregulation (1965–1980)	Increasingly deregulated environment with an urban population	Small self-service shops and supermarkets; large-scale advertising; large logistical hubs; IT increasingly important	Centralized distribution system; attractive brand image (low prices; good quality and service); ability to operate in the suburban supermarket business	Kesko	Kesko
Intensified competition (1981–1995)	Deregulated environment with an urban and economically wealthy population	Hypermarkets and supermarkets; very intensive advertising; IT very important in all aspects of the logistical chain	Ability to economize the logistical chain by using IT; ability to found and run hypermarkets with aggressiveness and cohesiveness in pricing and advertising	Kesko	SOK

and IT solutions at the same pace as SOK and OTK/EKA. With hindsight, the changing nature of the market and technologies does not seem totally unexpected. Indeed, all the major changes were forecast and published long before they were actualized in the daily business environment (see e.g., Herranen, 2004). Thus, the differences in action and performance cannot be traced to the capabilities of the particular managers leading the companies but rather to strong path-dependent factors in each company. We will now offer explanations for this development.

When interpreting the evolution and performance of the companies, it becomes clear that the companies differed considerably in their perception of the environment and their own organization. First, TUKO's political structure and the ideology of the company made it virtually impossible to search for radical strategic alternatives, as all such changes would have destroyed the status of the wholesale owners. In this case, the organizational structure and ideology were strongly intertwined, especially after the first radical change in the 1960s. Previously, the wholesale-based structure alone modified managerial cognition, but in time the structural arrangements became ideological issues. Second, and consequently, the top management of TUKO maintained its belief that survival would be possible without such radical change. In fact, they interpreted TUKO's relative stagnation as a differentiation strategy, contrasting with the dominant trend toward larger distribution units and outlets. Thus, we can identify a causal link from the structure to ideology and finally to managerial cognition.

The success of Kesko's loosely coupled organizational structure in the 1960s made it possible to incrementally stabilize and tighten its internal system of marketing and management. However, the relative stagnation in the early 1990s can be interpreted as a consequence of structural and ideological issues that modified managerial cognition and thus organizational actions. In this case, the amazing success of the firm in the 1960s–1980s made the top management and major shareholders misperceive that Kesko's business model would continue to dominate the market even if all its competitors were significantly changing their ways of operation. Thus, rather similar to TUKO's case, organizational structure was institutionalized as an ideology that then caused a misperception of market environment.

SOK's aggressive turnaround in the 1980s, on the contrary, was an example of radical change of its strategic direction. Interestingly, the reason for that success seems to be in the analytical and administrative capabilities of the company and in its structure, which favored such top-down decisions as the adaptation of point-of-sales terminals. Also, the massacre of its small shop network in the latter part of the 1980s was facilitated by the fact that the shopkeepers did not own their outlets. SOK is thus an example in which the organizational structure facilitated managerial perception and action, whereas ideology played even a surprisingly small role in the firm evolution.

According to our study, three issues potentially can explain OTK/EKA's demise. First, although OTK/EKA was flexible in adapting new technology, it clearly had difficulty in taking full advantage of it. For example, when starting in the supermarket business in the early 1970s, the concept was a compromise between self-service and full service, with a more expensive price image than especially Kesko offered. Second, the retailing was only a fragment of OTK/EKA's business portfolio, which can mean that the financial problems originated only partly in the retail business. Third, and most importantly, OTK's organizational structure and ideological basis seriously modified top management's perception of the market environment. This was clearly seen, for example, in the total absence of a grocery-specific strategy in the 1960s. Overall, OTK/EKA's case includes all elements in our research framework. The diversified organizational structure, technical and systemic properties, and ideology strongly modified managerial perception, leading to a series of suboptimal strategic choices.

8. Conclusion

Path dependence has received increasing popularity in strategic management literature as a consequence of the rise of evolutionary and resource-based perspectives. But one could say that path dependence in strategy has remained a vague, even metaphorical tool to describe phenomena that are history dependent. On the contrary, the path dependence discourse in economics has continuously emphasized systemic and technical properties in explaining why path dependence occurs. Our primary motivation to study path dependence in the context of firm strategy was to go beyond either of these metaphorical or technical explanations.

Recently, some scholars have suggested that micro-level cognitive and structural aspects may be a strong alternative explanation for path dependence (cf. Heffernan, 2003). For example, Garud and Rappa (1994, 1995) argued that path dependence is as much a socio-cognitive phenomenon as a question of technical interrelatedness (cf. Kaplan *et al.*, 2003). In the context of behavioral organization theory, researchers have emphasized how organizational architecture modifies cognition (Jacobides, 2006) and how cognitive limits may explain why firms either continue doing the same or change via incremental steps (Winter, 2006).

Our contribution was first to continue the emerging discussion around path dependence and cognition. Second, we parceled the concept of cognition to include structural and ideological elements. Both essentially modify cognition and hence strategy and firm evolution. Especially the issue of ideology in the context of cognition and path dependence is novel.

In our empirical analysis, we adopted a broad view to path dependence. We focused on (i) the most essential changes in the properties in society and technology; (ii) strategic behaviors and path dependence at the level of firms; and (iii) ideological, structural, and cognitive antecedents of path-dependent strategic behaviors. As concerns society and technology, we found that the market conditions changed dramatically two times during the period of analysis. Related to these changes, it became obvious that an understanding of the market environment acts as a necessary but not sufficient precondition for explaining why some firms were able to change their strategic trajectories and others were not. Consequently, the micro-level structural and cognitive elements of decision-making were shown to play a significant role in organizational survival and demise. Especially the ideological underpinning of cognition was manifested, for instance, in the strongly path-dependent behavior of the two co-operatives (OTK and SOK).

The broadness of our approach calls for several types of new research. First, to understand more deeply the relationship between ideology and competitive advantage would require more detailed micro-historical analyses of individual firms and managers. In other words, the micro-level mechanism of how cognitions mediate between an ideologically inclined strategy and performance outcomes needs explanation. Second, the concept of path dependence itself requires more theorizing in the context of strategy. For example, it is still an open question whether path dependence is a negative or positive issue in the context of firm evolution. Indeed, firms need to maintain some level of consistency in their strategic behavior, but we do not know what that level is. To answer this, again, requires empirical studies that connect the changes in the market environment and firm-level strategic behaviors.

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Appendix

Table A1 Analytical levels, key variables, and sources

Analytical level	Variable	Source	Dimensions
Society	Social change	Finland's official statistics (SVT)	Number of urban inhabitants; number of cars
	Economic change	Finland's official statistics (SVT); Growth study—reports (Hjerppe, 1989, 1996)	GDP per capita
Technology	Technological change	Finland's official statistics (SVT); AC Nielsen archive	Number of computers; number of different store types
Firm and its strategy	Logistical change	Annual reports	Number of storehouses; adaptation of information technology
	Store type	AC Nielsen archive; Annual reports	Large (over 2500 m^2); medium (400–2500 m^2); small (under 400 m^2)
	Market share	AC Nielsen archive; Annual Reports	Percentage of the sales volume of the four major retail companies
	Advertisement	Newspapers (Helsingin Sanomat; Turun Sanomat; Keskisuomalainen)	Large (whole page); medium (over $^1/_2$ page); small (under $^1/_2$ page)
Structure, cognition, and ideology		Company archives; interviews	Managerial perceptions