

# Organizational Innovation in the Face of Institutional Change: The Case of the Finnish Dairy Sector

**Lampros Lamprinakis**

*Norwegian Agricultural Economics Research Institute (NILF), Norway*

*lampros.lamprinakis@nilf.no*

## Abstract

Firms in the agri-food industry are embedded in a system of institutions, regulations and policies that shape their economic environment and affect their conduct and performance. Changes in this system can propose new challenges for the firms that need to adequately and efficiently change and adapt to the emerging environment. The following article examines how deep structural changes in the institutional and regulatory setting can be effectively addressed by organizational innovation and what can be the catalysts behind a successful innovation effort. In doing so the analysis examines the case of Valio, the largest Finnish dairy company and its reconstruction effort due to Finland's EU accession in 1995. After years of restructuring and changing its business model the company remains a major player in Finland and one of the most well-known brands in the region.

**Keywords:** *structural changes, dairy sector, new business model, environment*

## 1 Introduction

The modern food system is a dynamic, interdependent system where actors from various layers of the socio-economic fabric interact. These interconnected layers include the producers in the agri-food industry, processors, retailers, consumers and the institutional and regulatory setting where these actors operate. Changes in this system can introduce new challenges for the firms that need to efficiently change and adapt to the emerging environments. The following article examines how deep structural changes in the institutional and regulatory setting can be effectively addressed by organizational innovation and what can be the catalysts behind a successful innovation effort. In doing so the analysis examines the case of Valio, the largest Finnish dairy company and its reconstruction effort due to Finland's EU accession in 1995.

A well-established "national institution", Valio had a rich background based on cooperative tradition and extensive regional spread (Simonen 1955; Hokkanen 1980; Perko 2005a, 2005b). In the late 1980s and early 1990s Valio had to undergo through a process of re-organization and restructuring in order to address the increased challenges arising from the EU accession (Perko 2005b). Its organizational innovation involved personnel, structure and processes where the cooperative had to re-invent itself with a whole new business model. In doing so, several internal processes had to change as well as the production and management practices. In a massive restructuring program that lasted more than a decade the company completed a substantial project of downsizing and streamlining that included the closure of dozens of dairy plants and laying-off more than half of its personnel; in the production side, Valio focused on the production of value-added dairy products as opposed to the bulk dairy stuff. After years of restructuring and changing in its business model, Valio remains a major player in Finland and one of the most well-known brands in the region.

The analysis is based on the comprehensive qualitative case study methodology (Yin 1994) following a descriptive and explorative approach. This approach involves 13 detailed and in-depth interviews with executives, stakeholders and industry insiders. The analysis attempts

to map and identify the adaptation effort and the underlying processes in terms of decision-making (Gibbons 2003; Bolton and Dewatripont 2010) and organizational change (Hannan and Freeman 1984). This in-depth analysis on Valio's transformation will help identify the adaptation and restructuring process that allowed the organization to survive and remain relevant in the marketplace. In that respect the analysis has to offer not only a contribution to the relevant literature on organizational change (Van de Ven and Poole 1995) but it will also provide learning outcome and assessment process.

## **2 Organizational innovation, environmental change and the transformation of an organization**

### *Organizational innovation*

Organizational innovation has received increased attention from a variety of scientific disciplines. The result is a diverse innovation literature that includes articles from different areas – social psychology, sociology, management, engineering, economics, and marketing (King 1990; Gopalakrishnan and Damanpour 1997). Lam (2005) distinguishes between three main streams of research: organizational design, organizational cognition and learning, and organizational change and adaptation. This diversity resulted to different definitions of innovation that sometimes relate it to competitiveness and competitive advantage (Wolfe 1994; Leonard-Barton 1995; du Plessis 2007), while others to the long-term organizational survival and the ability of the company to efficiently adapt (Scott and Bruce 1994; Gopalakrishnan and Damanpour 1997).

In its most general sense the concept of organizational innovation implies a new framework that is either created or adopted by the organization (Hage and Aiken 1970; Zaltman et al. 1973; Daft and Becker 1978; Hage 1980; Damanpour 1988, 1991; Oerlemans et al. 1998; Wood 1998; Zammuto and O'Connor 1992). This framework can involve ideas, processes, products or even behaviors (Daft 1978; Damanpour and Evan 1984; Damanpour 1996). Organizational innovation can thus be considered as consisting of three main elements: change, novelty and improvements in performance (Hage 1999; Johannessen et al. 2001; Strambach 2002; Jorna and Waalkens 2006).

Managing organization innovation has been a central focus on the business strategy literature that identifies four main strategies. The first is through the use of *internal exploratory environments* that allow a safe environment where new products, services and processes can be tested and adjusted (Tushman and O'Reilly 1996). Alternative, new products and structures can be tested in *semi-autonomous business units* that typically operate independently of the main organization (Joiner 2005). These units design and implement new structures and models that occasionally may compete with the parent company. *Corporate venture capital structures* are indented for investments and experimentation with new technologies, while organizations may choose to innovate through the *acquisitions* of companies that have already established innovative behavior on those aspects that the organization is lacking (Karim and Mitchell 2004; Dushnitsky and Lenox 2005).

### *Environmental change*

Environmental changes come in different types and forms and can include market turbulence, radical institutional change, hyper-competition, recessions, sectorial or industrial decline and deregulation, or business turnaround. A vast literature stretching from business strategy to organizational sciences examines firms' adaptation to changing environments

and suggests several hypotheses on strategic change and organizational survival. These hypotheses range from firms' properties and structure to strategic decisions and implementation.

Strategic change and adaptation is a complex concept involving several processes -e.g., understanding change, strategic planning, and business transformation. Strategic adaptation is typically associated with internal changes in the organization and overall business restructuring. These changes can relate to replacing management, reorganization of sections and divisions, and other changes (Whittington 1991; Geroski and Gregg 1994). In some cases the literature identifies contradictory forces that can influence a firm's strategy. For instance "organizational inertia" that typically is a characteristic of incumbent firms can prevent firms from adapting to new environmental conditions. On the other hand, the "pit-stop" theory suggests that firms may increase their innovation effort and become more proactive in certain types of environmental change (Geroski and Gregg 1997).

Strategy literature identifies two important properties of the firm that can contribute on firm's survival. First is the concept of *strategic flexibility* -i.e., the ability of a firm to quickly respond to changing conditions that affect its competitive environment (Hitt et al., 1998; Grewal and Tansuhaj 2001). The second property is the *adaptation efficiency* of the firm. A "statically efficient" firm makes the most efficient use of resources under the given circumstances, while a "dynamically efficient" firm exhibits capability of surviving in changing circumstances (Silberston 1982). Finding ways to balance between the two types of efficiency along with increased strategic flexibility contribute towards firm's survival and after crisis performance (Silberston 1982; Grewal and Tansuhaj 2001).

The uncertainty that is typically inherent in an environmental change presents businesses with the dilemma of whether cutting costs and thus preserving their resources, or investing in new products and ventures (Whittington 1991). This dilemma is illustrated in the main strategies that are described in the strategy literature: the proactive or investment, retrenchment, and ambidextrous strategies.

Proactive strategies, also called investment strategies, are aggressive strategies that are associated with an increased expenditure on business innovation and R&D, product quality enhancements and market diversification. Development of new products and identifying market niches can play central role in this kind of strategies (Clifford 1977; Hayter 1985; Picard and Rimmer 1999). Popular strategies in this category also include increased marketing spending (Goodell and Martin 1992; Pearce II and Michael 1997; Roberts 2003; Srinivasan et al. 2005; Pearce II and Michael 2006) and pricing strategies (Chou and Chen 2004). The undertaking of proactive strategies can be risky while the results can take long to materialize; therefore, many firms focus instead on short-term less risky alternatives. In other cases, firms may lack the resources or the know-how on implementing such investment strategies effectively and thus prefer retrenchment strategies instead (Pearce and Robbins 1994; Robbins and Pearce 1992).

Retrenchment strategies appear to be more common and involve the general streamlining and rationalization of the business. Cutting operating costs on all levels and divestment of assets and business, expenditure cuts and closing or merging establishments and plants are typical strategies in this category (Rones 1981; Shama 1993; Geroski and Gregg 1997; Michael and Robbins 1998; DeDee and Vorhies 1998). However, increasing cost efficiencies may not be sufficient for all firms. Recent literature favors towards a more holistic approach on business strategies that is no limited securing cost efficiencies (Geroski and Gregg 1994,

1997). That approach is called ambidextrous approach and is a combination of retrenchment and investment strategies.

Ambidextrous organizations implement strategic combinations of both proactive and retrenchment strategies (He and Wong 2004; Raisch and Birkinshaw 2008; Tushman and O'Reilly 1996). For many firms these strategies can provide a useful alternative since they allow them to combine cautious reduction of operational costs and investment in innovations and market development (He and Wong 2004; Raisch and Birkinshaw 2008). Following an ambidextrous approach on business strategy allows for more flexibility and can be used to balance between the dynamism of being proactive with the increased security of retrenchment (Geroski and Gregg 1994, 1997; Whittington 1991).

Proactive, retrenchment and ambidextrous responses can be further represented as elements in a two dimensional matrix taking additional considerations on where each strategy is being directed - externally or internally (Sternad 2011). Chattopadhyay et al. (2001) first made the distinction between externally-directed and internally-directed actions; externally directed actions aim towards the market, while the internally-directed actions aim areas within the organization.

### 3 Data Collection and Methodology

The research data consists of MTT publications<sup>1</sup>, the magazine published by Valio (*Maito ja me*), relevant literature and the personal interviews. Several books have been published over the years focusing on the history of the company (Simonen 1955; Hokkanen 1980; Perko 2005a). The first two books are available only in Finnish, while for the last one a condensed English version is also available (Perko 2005b) with references to a series of articles from *Maito ja me* published in the 1990s concerning the EU accession. These multiple sources provided support to the analysis focusing on the interview responses.

The key source of evidence came through 13 personal in-depth semi-structured interviews with management employees, executives, past directors and industry insiders. By having some topics of discussion rather than a fixed set of interview questions allows for a more flexible approach to interviewing (Yin 1994). The interviewees were furthermore encouraged to let their responses go beyond the scope of the interview and provide anecdotes they felt were important to understanding the processes we examined. Participants were interviewed privately and all necessary measures were taken to ensure confidentiality and data integrity. The interviews conducted lasted between 60 and 90 minutes and were exploratory in nature. A standard interview guide was developed and applied to all interviews, which were audiotaped and later transcribed and anonymized. The data were thus predominantly qualitative in nature, and the RDQA library (an R package for Qualitative Data Analysis) was used for handling the data (Huang 2011).

During the interviews the responders could withdraw at any time, decline to answer any particular question(s) and had the right to shut off the tape recorder at any time if they chose to do so. After the interviews were concluded responders could also withdraw from the study for any reason, at any time up to the point where data had been anonymized. After that, it was not possible to identify and remove individual data and, consequently, delete them. The interviews generated one hundred and fifty four pages of transcripts that

---

<sup>1</sup> MTT Agrifood Research Finland is the largest research institute in the field of agricultural and food research and agricultural environment research, operating under the Ministry of Agriculture and Forestry.

were analyzed along with a number of artifacts that the respondents produced during the interviews (sketches, organizational charts, presentation print-outs).

#### 4 Findings – emerging themes on adaptation phases

Valio was founded in 1905 by 17 member dairies as an export cooperative for Finnish butter. The company grew over the years and after the 1940s Valio started to manufacture its own cheese as well as selling milk to consumers. The year 1955 marked the 50th anniversary and the company changed its name to Valio Finnish Cooperative Dairies' Association. In the early 1990s, the various dairies consolidated into regional dairy companies and Valio was incorporated as Valio Ltd in 1992. Its growth remains strong in the coming years and the company is established as the *de facto* dominant player in the sector (Perko 2005b).

The findings reflect on the time prior to Finland's accession to the EU and thus are roughly covering the period from the early 1980s until 1995 when Finland joined the EU. An inductive thematic analysis of the responses allowed the development of the main thematic categories (Kvale 1996). These emerging themes illustrate that the adaptation process for the organization went through three phases - the changes in the environment created the first stimuli, the understanding of what was happening followed and finally the organization adopted survival strategies and response (Fig. 1).

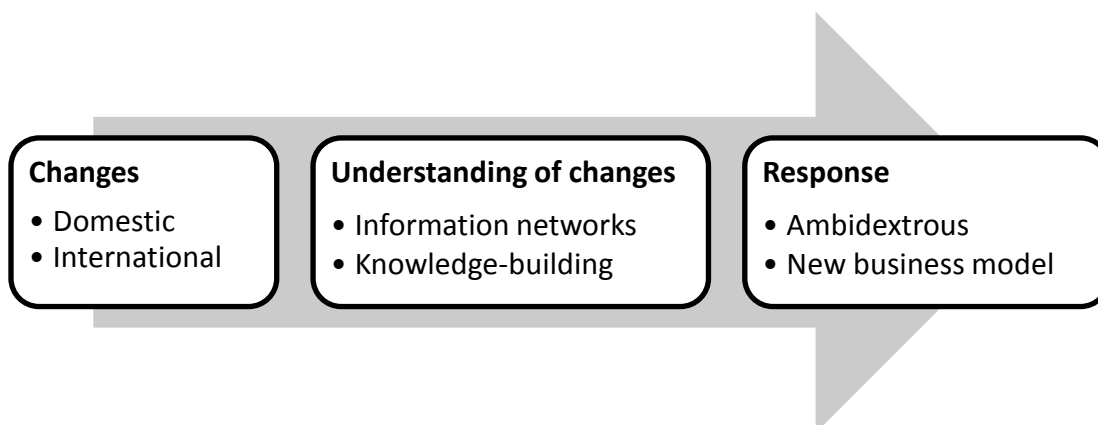


Figure 1. Phases of the adaptation process

##### *Environmental change – sources of change and disruption*

Two important sources of environmental change can be identified during the examined period. The first source of change appeared in the early 1990s and had to do with the competition law in Finland, while the second source of change came a couple of years later with Finland's preparations for EU membership. These two sources of change may not be entirely isolated; however, they can be assigned to different areas. The first was domestically based, while the second had an international scope.

The introduction of the new competition legislation in Finland created the first pressures for the new business model of Valio. According to the former business model dairy production was divided among a handful of regional cooperative dairies that then had a common sales organization. That kind of centralized marketing was now forbidden since it fell under the provisions of a cartel. Instead, the regional dairy cooperatives would have to either compete with one another or merge into one organization. For most respondents this dilemma was a catalyst on merging the regional coops together and creating modern Valio.

*“...one main point which helped quite a lot was the changes in the Competition Law, they saw that they can’t anymore have the same prices and operate through Valio, [otherwise] there wouldn’t be any change...they really had to change their structure. I think that was a main point why they then got this common opinion...”*

The new competition legislation allowed Valio’s members to “reach a common ground and understanding” and start the process of merging the regional operations under Valio.

*“...farmers found a common opinion on how to combine their forces and so on... there were some reasons for that and I think the biggest one was the Competitive Law that changed here...”*

In retrospect, the creation of the new Valio allowed the better and more efficient adaptation to the EU – an environmental change that brought the transition from a closed and tightly regulated system to a more liberal and market-driven economy (Niemi and Ahlstedt 2005; Tomšík and Rosochatecká 2007). Coordinated discussions in Valio regarding the issues surrounding a possible EU accession appear in the early 1990s even though some preliminary thoughts and organized forums appear as early as mid-1980s.

The potential of an EU membership was perceived as a critical environmental change that could have profound effects on all aspects of the business. These kinds of changes are typically considered as sources of threats but also opportunities for an organization (Meyer et al. 1990). In the case of Valio, however, the potential of EU membership gave rise to anxiety and a sense of threat.

*“I would say that two adjectives could describe it... apprehension on ‘what will come’ and suspicion on ‘how will we survive...’...a defensive position... ‘what on earth is going to happen to us?’... “*

In particular, the opening of the borders to EU products and the disengagement of the state was perceived as particularly difficult challenges that the firm had to face. The relatively high prices and the cost disadvantage that the Finnish dairy sector had at the time relative to the EU was particularly worrisome for many in the organization.

*“...the prices for dairy products were higher in Finland than they were in most other EU countries. So people were scared ‘what will happen’... ‘how can we compete... the country will be flooded by imports...’ and so on...”*

These disadvantages were primarily related to the “heavy structure” of the sector –i.e., cost and production inefficiencies. These structural inefficiencies combined with the challenges ahead and the anticipated higher competition were the source of pessimism for the future of the organization.

*“... the bigger question inside Valio was that we had a very heavy structure... we had many many plants... dairy plants and so on... I remember that our managing director said that we have... we have 500 million Finish marks to save which is about 100 million euros... and at that time we all thought that it is not possible. It cannot be done...”*

*Understanding change – what happens and why*

The acquisition of relevant information was an area where the company managed quite well. One of its main strengths was the extended, well-connected and particularly active information network it kept across Europe. Through this network company officials and executives managed to sustain a constant stream of extensive and up-to-date information on markets and institutions in Europe. Valio kept that network throughout the years and it became particularly active during the final stages of the EU negotiations.

*“...so during perhaps the three last years before entering the EU we monitored all EU systems – CAP, agricultural policy developments, prices in EU countries and so on...we did extensive market monitoring ... we also estimated how things like export subsidies, other subsidies and so on would change, what would be the price level after we had entered the EU, what the competition will look like etc...”*

This information was further used on several projects where special teams in the organization examined and analyzed company’s efficiencies and competence vis-à-vis the EU competition. This kind of projects can be traced back to the late 1980s:

*“...for example it was established a group just to make a study in terms of financing, economy and production efficiency. The group made a study comparing the Finnish dairy business to Sweden, Denmark... even Norway and Netherlands...they compared many many things...mostly how relatively efficient is the production on different dairy products ...how efficient they are... And this study was later presented to the Supervisory Board of Valio...”*

At the later stages and as it was getting closer to the potential of an EU membership the company followed a more aggressive and active information gathering technique. Valio’s delegates and company officials started collecting first-hand and from the field information by visiting several foreign firms and becoming accustomed with their structures, routines and organization processes.

*“We visited many of them... first we sent a letter to them and ask them if it is possible to get over and visit them... and of course they were ready for that... we had met in some seminars or high level conferences so they were very polite. We also explained the reason for this study...”*

The gathering and process of all this information allowed the organization to buildup knowledge, and through this knowledge to frame its expectations regarding the forthcoming changes.

*“...Valio had a very good network before the European Union time so I think that nothing came as a surprise...”*

The rich information that the company gathered through the years along with the thorough analysis and studies allowed for a better understanding of its situation and its changing environment. This understanding was identified as a critical element in its adaptation process.

“... it was very important that we had these information channels...and we were able to communicate what happens and why... There were of course many many other things and talents needed but if this had failed I think that...we wouldn't have a very much success story...”

*Response strategies – ambidextrous response and new business model*

The response strategies that are identified in the analysis of the interviews are a mixture of both investment (proactive) and retrenchment (rationalization) strategies. Proactive strategies are typically aggressive strategies that a company pursues in anticipation of changes in its economic environment. Retrenchment strategies focus on reducing expenditures and operations in an attempt to secure the organization’s financial stability. The identified response strategies and their targeted environments are registered in a two-dimensional matrix (Fig. 2).

	Proactive strategies		Retrenchment strategies	
Internal environment	R&D Quality	Investment	Personnel Administration Production Logistics	Rationalization
External environment	New markets Marketing Customer satisfaction		Sales Domestic network	

**Figure 2.** Identified response strategies

An environmental change (or “environmental jolt”) can present opportunities to invest, innovate and expand into new markets (market diversification). Such opportunities were the driving force behind the identified proactive strategies. In the external environment these strategies targeted on customer satisfaction, product and market development and an overall increased marketing effort. In the internal environment proactive strategies focused on R&D and quality.

“... more premium or special products came... because we saw that if Finland would join the European Union the Valio’s competitiveness will be very low with the bulk products... so Valio was working with this different kind of products, products that have more value...value-added products ...that kind of products Valio have been developing in order to be more competitive ...”

The company therefore, refocused its strategies and efforts from the production of bulk dairy products to the marketing and sales of value-added dairy foods. That development came as a result of the new business model that started to emerge, where market forces replaced the tight state regulation.



*“...we had to ensure that we had a product range that was interesting enough and attractive enough for the consumers so that they would buy Valio products...”*

*“...we have been able to change from a production company to a marketing company in the sense...that the key focus is to sell branded products to consumers and also to invest in R&D so that you can keep your production update... so that you remain competitive on the market.”*

These new products targeted not only the domestic market but also foreign markets. In that respect the identification and development of new markets was also prioritized. The concept of “natural markets” was used from many responders when referring to markets that seemed good candidates for increased export activity.

*“...we concentrated on our natural markets and we concentrated on the consumer products not industrial products...and not in the bulk products...the consumer value-added stuff only...and also we did a lot of development in the markets in Russia and in Sweden...”*

The introduction of new products, the increased marketing efforts and the identification of new markets was combined with further strengthening of its brand through advertising. By maintaining a strong and well received brand image the company effectively engaged in preemptive competition (Salop 1979; Schmalensee 1983; Bagwell and Ramey 1990).

*“... building the Valio brand was one of the most important things...and we wanted to strengthen it all the time...so we put more money to advertising... to increase the advertising pressure before the competitors are coming to the area...”*

By the early 1990s Valio had become “more market-oriented than it used to be and more consumer-oriented than it used to be”. The focus of attention was shifted to consumers and the development of the new value-added products and markets. This effort was further supported with increased R&D and marketing activities that helped move the organization towards its new business model.

*“I would say that the reorganization process focused on the marketing, branding the products, putting more effort to R&D... I would say that those changes were the biggest compared to the earlier model...”*

The aforementioned proactive strategies were combined with retrenchment strategies focusing on the rationalization and the streamlining of several stages of production and operations. Retrenchment strategies targeted primarily the internal environment - administration, personnel and logistics. The main idea was that through streamlining the company would become more competitive and that could help its long-term survival. A good deal on this plan was the downsizing of several plants and operations and the closure of others.

*“...so the challenge that was given was to go through the downsizing process in this company in order to find out the competitiveness possibilities in the new environment... the Valio group and the dairy cooperatives had about 10 000 employees that was downsized to*

*something like 4 000... so the company went through 7-8 years of quite a tough program of rationalization..."*

The downsizing and closing of plants was a sensitive subject since unsurprisingly "nobody wanted to be closed". The years of state protection and tight regulation had resulted in a situation where most plants had built up over-capacity and were under-utilized so "it was typical that many production managers were running their plants only a few hours per day". In addition, the company had to deal with extensive and overstaffed sales organizations and domestic networks that the new business model no longer required. However, it was not the first time in Valio's history that downsizing strategies had to be adopted. Since the early 1980s there was a movement on closing small dairies and building instead bigger and more efficient units.

*"...since the early 1980s they were closing small dairies and building bigger units... the only point was that most of the times we had been able to offer jobs to the people who were laid off ...when we closed a dairy we could offer work somewhere else, but during this period [before EU accession] it was such a big wave of closures that we couldn't offer jobs to all these people..."*

In overall the organization focused on securing cost efficiencies, combined with significant innovation and exploration activities, thus adopting an ambidextrous approach (He and Wong 2004; Raisch and Birkinshaw 2008). Most characteristic is the case of the marketing and R&D departments that even though suffered some downsizing they were reinstated and enforced.

*"...the restructuring period... it was very hard times, especially in the 1990s when plants were closing and so on... this has been a very very dramatic change and very hard times...many people lost their jobs and plants were closed... but always during this time extra attention was paid to marketing, brand building and we also made investments for these things even though we had to cut costs... so yes, we invested in R&D, marketing, brands and some development activities as well, even though we had to cut our costs..."*

## **5 Conclusions**

The article addresses some of the main issues surrounding an organization's adaptation and restructuring process due to structural changes in its institutional and regulatory setting. In particular, the analysis focuses on Valio, the largest dairy company in Finland, and its reorganization and response strategies towards Finland's EU Membership. The findings illustrate how the organization exhibited ambidextrous properties by engaging itself in both proactive and retrenchment strategies. After more than a decade of restructuring and changing its business model the company remains a major player in Finland and one of the most well-known brands in the region.

The reorganization and adaptation process can be perceived as going through three phases – changes in the environment created the first stimuli, the understanding of these changes followed and finally the response strategies. Key elements in the whole adaptation process were the good information that the organization managed to gather and the proper analysis of that information that allowed the creation of knowledge and the anticipation for future changes. Thus the company exhibited adequate strategic flexibility along with adaptation

efficiency. The organization managed to radically reconstruct itself with a new business model that involved new processes, products and behaviors. In doing so, it engaged itself in an innovation process that allowed for adaptation and ultimately long-term organizational survival.

### Acknowledgements

The author gratefully acknowledges the funding that was provided for this research by the Research Council of Norway (Norges forskningsråd).

### References

- Bagwell, K., Ramey, G. (1990). Advertising and Pricing to Deter or Accommodate Entry When Demand is Unknown, *International Journal of Industrial Organization*, **8**(1): 93-113.
- Bolton, P., Dewatripont, M. (2010). "Authority in Organizations." Forthcoming in R. Gibbons and J. Roberts (eds.), *The Handbook of Organizational Economics*. Princeton, NJ: Princeton University Press.
- Chattopadhyay, P., Glick, W. H., and Huber, G. P. (2001). Organizational Actions in Response to Threats and Opportunities. *The Academy of Management Journal*, **44**(5): 937-955.
- Chou, T. J., Chen, F. T. (2004). Retail Pricing Strategies in Recession Economies: The Case of Taiwan. *Journal of International Marketing*, **12**(1): 82-102.
- Clifford, D. (1977). Thriving in a Recession. *Harvard Business Review*, **55**(4): 57-65.
- Daft, R. L. 1978. A Dual-Core Model of Organizational Innovation. *Academy of Management Review*, **21**(2): 193-210.
- Daft, R., Becker, S. (1978). *Innovation in Organizations: Innovation Adoption in School Organizations*. New York, NY: Elsevier.
- Damanpour, F. (1996). Organizational complexity and innovation: developing and testing multiple contingency models. *Management Science*, **42**(5): 693-716.
- Damanpour, F. (1991). Organizational Innovation: A Meta-Analysis of Effects of Determinants and Moderators. *The Academy of Management Journal*, **34**(3): 555-590.
- Damanpour, F. (1988). Innovation type, radicalness and the adoption process. *Communication Research*, **15**(5): 545-567.
- Damanpour, F., Evan, V. M. (1984). Organizational innovation and performance: the problem of organizational lag. *Administrative Science Quarterly*, **29**(3): 392-409.
- Dedee, J., Vorhies, D. (1998). Retrenchment Activities of Small Firms During Economic Downturn: An Empirical Investigation. *Journal of Small Business Management*, **36**(3): 46-61.
- du Plessis, M. (2007). The Role of Knowledge Management in Innovation. *Journal of Knowledge Management*, **11**(4): 20-29.
- Dushnitsky, G., Lenox, M. (2005). When do incumbents learn from entrepreneurial ventures? Corporate venture capital and incumbent firm innovation rates. *Research Policy*, **34**(5): 615-639.
- Geroski, P. A., Gregg, P. (1997). *Coping with Recession: UK Company Performance in Adversity*, Cambridge University Press.
- Geroski, P. A., Gregg, P. (1994). Corporate Restructuring in the UK during the Recession. *Business Strategy Review*, **5**(2): 1-19.
- Gibbons, R. (2003). Team Theory, Garbage Cans, and Real Organizations: Some History and Prospects of Economic Research on Decision-Making in Organizations. *Industrial and Corporate Change*, **12**: 753-787.
- Goodell, P., Martin, C. (1992). Marketing Strategies for Recession Survival. *Journal of Business & Industrial Marketing*, **7**(4): 5-16.
- Gopalakrishnan, S., Damanpour, F. (1997). A Review of Innovation Research in Economics, Sociology and Technology Management. *Omega*, **25**(1): 15-28.
- Grewal, R., Tansuhaj, P. (2001). Building Organisational Capabilities for Managing Economic Crisis: The Role of Market Orientation and Strategic Flexibility. *Journal of Marketing*, **65**(2): 67-80.

- Hage, J. T. (1999). Organizational Innovation and Organizational Change. *Annual Review of Sociology*, **25**(1): 597-622.
- Hage, J. T. (1980). *Theories of Organizations: Form, Process, and Transformation*. New York, NY: Wiley.
- Hage, J., Aiken, M. (1970). *Social Change in Complex Organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Hannan, M., Freeman, J. (1984). Structural Inertia and Organizational Change. *American Sociological Review*, **49**: 149-164.
- Hayter, R. (1985). The Restructuring of Traditional Industries in a Time of Recession. *Tijdschrift voor economische en sociale geografie*, **76**(2): 106-120.
- He, Z. L., Wong, P. K. (2004). Exploration Vs. Exploitation: An Empirical Test of the Ambidexterity Hypothesis. *Organization Science*, **15**(4): 481-494.
- Hitt, M. A., Keats, B. W., and DeMarie, S. M. (1998). Navigating in the New Competitive Landscape: Building Strategic Flexibility and Competitive Advantage in the 21st Century. *Academy of Management Executive*, **12**(4): 22-42.
- Hokkanen, K. (1980). *Maidon tie 1905-1980*, Yhteiskirjapaino Oy, Helsinki.
- Huang R. 2011. RQDA: R-based Qualitative Data Analysis. R package version 0.2-1. <http://rqda.r-forge.r-project.org/>
- Johannessen, J., Olsen, B., and Lumpkin, G. T. (2001). Innovation as newness: what is new, how new, and new to whom? *European Journal of Innovation Management*, **4**(1): 20-31.
- Joiner, W. B. (2005). Leadership for Organizational Learning. In John D. Adams (ed.), *Transforming Leadership* (second edition), New York: Cosimo Books.
- Jorna, R. J., Waalkens, J. (2006). Innovation: Many-headed and certainly important. In R. J. Jorna (ed.), *Sustainable Innovation. The organisational, human and knowledge dimension* (pp. 15-27). Sheffield: Greenleaf Publishing Ltd.
- Karim, S., Mitchell, W. (2004). Innovation through acquisition and internal development: A quartercentury of business reconfiguration at Johnson & Johnson, *Long Range Planning*, **37**: 525-547.
- King, N. (1990). Innovation at Work: The Research Literature. In M. A. West and J. L. Farr (eds.), *Innovation and Creativity at Work: Psychological and Organizational Strategies*, Chichester: Wiley.
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, California: Sage Publications.
- Lam, A. (2005). Organizational Innovation. Chapter 5 of J. Fagerberg, D. C. Mowery and R. R. Nelson (eds.), *The Oxford Handbook of Innovation*, Oxford: Oxford University Press.
- Leonard-Barton, D. (1995). *Wellsprings of Knowledge. Building and sustaining the sources of innovation*. Boston, Massachusetts: Harvard Business School Press.
- Meyer, A., Brooks, G., and J. Goes, J. (1990). Environmental Jolts and Industry Revolutions: Organizational Responses to Discontinuous Change. *Strategic Management Journal*, **11**(5): 93-110.
- Michael, S., Robbins, D. (1998). Retrenchment among Small Manufacturing Firms during Recession. *Journal of Small Business Management*, **36**(3): 35-45.
- Niemi, J., Ahlstedt, J. (eds). (2005). Finnish Agriculture and Rural Industries 2005 – Ten Years in the European Union. MTT Agrifood Research Finland, Economic Research, publications 105a.
- Oerlemans, L., Meeus, M., and Boekema, F. (1998). Do Networks Matter for Innovation? The usefulness of the economic network approach in analysing innovation. *Journal of Economic & Social Geography*, **89**(3): 298–309.
- Pearce, J. II, Michael, S. (2006). Strategies to Prevent Economic Recessions From Causing Business Failure. *Business Horizons*, **49**(3): 201-209.
- Pearce J. II, Michael, S. (1997). Marketing Strategies That Make Entrepreneurial Firms Recession-Resistant. *Journal of Business Venturing*, **12**(4): 301-314.

- Pearce J. II, Robbins, D. K. (1994). Retrenchment remains the foundation of business turnaround. *Strategic Management Journal*, **15**(5): 407–417.
- Pearce J. II, Robbins, D. K. (1993). Toward Improved Theory and Research on Business Turnaround. *Journal of Management*, **19**(3): 613-636.
- Perko, T. (2005a). *Valio ja suuri murros*, Kustannusosakeyhtiö Otava, Keuruu.
- Perko, T. (2005b). The Valio Story: From butter exports to international business, Kustannusosakeyhtiö Otava, Keuruu.
- Picard, R. G., Rimmer, T. (1999). Weathering a Recession: Effects of Size and Diversification on Newspaper Companies. *The Journal of Media Economics*, **12**(1): 1-18.
- Raisch, S., Birkinshaw, J. (2008). Organisational Ambidexterity: Antecedents, Outcomes, and Moderators. *Journal of Management*, **34**(3): 375-409.
- Robbins, D. K., Pearce, J. II (1992). Turnaround: Retrenchment and recovery. *Strategic Management Journal*, **13**(4): 287–309.
- Roberts, D. K. (2003). What Strategic Investments Should you Make During a Recession to Gain Competitive Advantage in the recovery? *Strategy & Leadership*, **31**(4): 31-39.
- Rones, P. (1981). Response to Recession: Reduce Hours or Jobs? *Monthly Labor Review*, **104**: 3-11.
- Salop, S. (1979). Strategic Entry Deterrence, *American Economic Review*, **69**(2): 335-338.
- Schmalensee, R. (1983). Advertising and Entry Deterrence: An Exploratory Model, *Journal of Political Economy*, **91**(4): 636-653.
- Scott, S. G., Bruce, R.A. (1994). Determinants of Innovative Behavior: A path model of individual innovation in the workplace. *The Academy of Management Journal*, **37**(3): 580-607.
- Shama, A. (1993). Marketing Strategies During Recession: A Comparison of Small and Large Firms. *Journal of Small Business Management*, **31**(3): 62-72.
- Silberston, A. (1983). Efficiency and the Individual Firm. In D. Shepherd, J. Turk and A. Silberston (eds.), *Microeconomic Efficiency and Macroeconomic Performance*, London: Philip Allen.
- Simonen, S. (1955). *Valio Meijerien Keskusosuusliike 1905-1955*, Yhteiskirjapaino Oy, Helsinki.
- Srinivasan, R., Rangaswamy, A., and Lilien, G. (2005). Turning Adversity into Advantage: Does Proactive Marketing During a Recession Pay Off? *International Journal of Research in Marketing*, **22**(2): 109-125.
- Sternad, D. (2011). Adaptive Strategies in Response to Economic Crisis: A Cross-Cultural Study in Two European Nations. isma Discussion Paper Series 02-2011.
- Strambach, S. (2002). Change in the Innovation Process: New knowledge production and competitive cities - the case of Stuttgart. *European Planning Studies*, **10**(2): 215-231.
- Tomšík, K., Rosochatecká, E. (2007). Competitiveness of the Finnish Agriculture after ten years in the EU, *Agricultural Economics (Agric. Econ. – Czech)*, **53**: 448-454.
- Tushman, M. L., O'Reilly, C. A. (1996). Ambidextrous organizations: managing evolutionary and revolutionary change. *California Management Review*, **38**(4): 8-30.
- Van de Ven, A.H., Poole, M. S. (1995). Explaining development and change in organizations. *Academy of Management Review*, **20** (3): 510-540.
- Whittington, R. (1991). Recession strategies and top management change. *Journal of General Management*, **16**(3): 11-28.
- Wolfe, R. A. (1994). Organizational innovation: review, critique and suggested research directions. *Journal of Management Studies*, **31**(3): 405-431.
- Wood, E. (1998). The Determinants of Innovation in Small and Medium-Sized Enterprises. Chapter 6 of J. Michie and J. Grieve Smith (eds.), *Globalization, Growth, and Governance: Creating an innovative economy*, Oxford: Oxford University Press.
- Yin, R. K. (1994). *Case Study Research: Design and Methods*. Sage: London, UK.
- Zaltman, G., Duncan, R., and Holbeck, J. (1973). *Innovations and Organizations*, New York, NY: Wiley.
- Zammuto, R., O'Connor, E. (1992). Gaining Advanced Manufacturing Technologies' Benefits: The Roles of Organization Design and Culture. *The Academy of Management Review*, **17**(4): 701-728.