

Kostas Karantininis  
Jerker Nilsson  
*Editors*



# Vertical Markets and Cooperative Hierarchies

*The Role of Cooperatives in the  
Agri-Food Industry*



Springer

## VERTICAL MARKETS AND COOPERATIVE HIERARCHIES

# Vertical Markets and Cooperative Hierarchies

The Role of Cooperatives  
in the Agri-Food Industry

*Edited by*

**Kostas Karantininis**

*Royal Veterinary and Agricultural University,  
Copenhagen, Denmark*

*and*

**Jerker Nilsson**

*Swedish University of Agricultural Sciences,  
Uppsala, Sweden*

 Springer

A C.I.P. Catalogue record for this book is available from the Library of Congress.

ISBN-10 1-4020-4072-5 (HB)  
ISBN-13 978-1-4020-4072-6 (HB)  
ISBN-10 1-4020-5543-0 (e-book)  
ISBN-13 978-1-4020-5543-0 (e-book)

---

Published by Springer,  
P.O. Box 17, 3300 AA Dordrecht, The Netherlands.

*www.springer.com*

*Printed on acid-free paper*

The Image of Triptolemos by Greg Morgan ([www.morgangreg.co.uk](http://www.morgangreg.co.uk), <http://www.morgangreg.co.uk/>)  
used with permission from Bioversity International (formerly known as IPGRI) who commissioned  
the original image

This publication is based on the presentations made at the European Research Conferences (EURESCO) on “Vertical Markets and Cooperative Hierarchies: The Role of Cooperatives in the International Agri-Food Industry – A EuroConference on Agri-Food Cooperatives in the New Millennium: Competition & Organisation” (Bad Herrenalb, Germany, 12–16 June 2003) and “Vertical Markets and Cooperative Hierarchies: The Role of Cooperatives in the International Agri-Food Industry – A EuroConference on the Strategies and Organisation of Agri-Food Cooperatives: Quality Assurance and Vertical Coordination” (Chania, Greece, 3–7 September 2004) organised by the European Science Foundation and supported by the European Commission, Research DG, Human Potential Programme, High-Level Scientific Conferences, Contract HPCF-CT-2000-00172. This information is the sole responsibility of the author(s) and does not reflect the ESF or Community opinion. The ESF and the Community are not responsible for any use that might be made of data appearing in this publication.



All Rights Reserved

© 2007 Springer

No part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher, with the exception of any material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work.



*Essays in Memory of  
Professor Konstantinos Oustapassidis  
Aristotle University of Thessaloniki, Greece*

## KONSTANTINOS OUSTAPASSIDIS 1951–2001

Konstantinos Oustapassidis was born in Alonia, Pierias, a small town in Northern Greece. Son of immigrants from the Black Sea, he grew up speaking the “pontiaki” dialect and being very proud of his heritage. He went to high school in nearby Katerini and then to Thessaloniki. He received his B.Sc. degree in agriculture from the Aristotle University of Thessaloniki (AUTH), in 1974. After completing his military service, he got his first job at ELVIZ, a Greek Feedstuff Firm, and attended the Graduate Business School of Thessaloniki where he received his second degree in 1979. He joined the Department of Agricultural Economics at AUTH in 1981 as a Scientific Research Associate. In 1984 he received a competitive national scholarship to pursue his PhD at Oxford University. After spending three years at Oxford he completed his PhD degree in 1987, and returned to AUTH and followed the tenure track until he became Full Professor of Agricultural Economics and Cooperatives in 1998. He also taught at the University of Thessaly, the University of Macedonia, and the Mediterranean Agronomic Institute of Chania. He served as chief financial officer of the Property Management Corporation of AUTH, and was a member of the Greek Antitrust Committee from 1995 to 2000. He passed away while on duty, among his colleagues, during a faculty meeting in the spring of 2001.

Professor Oustapassidis was one of the founders of modern industrial organization and cooperative studies in Greece. His teaching and research was on theoretical and empirical industrial organization, and cooperatives. He was dedicated and personally involved in student advising and in research collaborations with his colleagues. He will be remembered affectionately for his passion and dedication to scholarly research, his curiosity and pursuit of ideas, and his intellectual generosity.

### SELECTED BIBLIOGRAPHY OF K. OUSTAPASSIDIS

- Collins, A., S. Butt, and K. Oustapassidis. 2001. “Below Cost Legislation and Retail Product: Evidence from the Republic of Ireland.” *British Food Journal* 103(9):607–622.
- Vlachvei, A., I. Ananiadis, and K. Oustapassidis. 2001. “Selling Expenses and Profit Margins in Greek Wine Industry.” *European Research Management and Business Economics*.
- Notta, O and K. Oustapassidis, K.2001. “Profitability and Media Advertising in Greek Food Manufacturing Industries.”. *Review of Industrial Organization*. 18:15–126.
- Oustapassidis, K., A. Vlachvei. and O. Notta. 2000. “Efficiency and Market Power in Greek Food Industries.” *American Journal of Agricultural Economics*. 82:623–629.
- Oustapassidis, K. and A. Vlachvei. 1999. “Profitability and Product Differentiation in Greek Food Industries.” *Applied Economics* 31:1293–1298.
- Oustapassidis, K., K. Vlachvei, and K. Karantininis. 1998. “Growth of Investor Owned and Cooperative Firms in Greek Dairy Industry.” *Annals of Public and Cooperative Economics* 69(3):399–417.
- Oustapassidis, K. 1998. “Performance of Strategic Groups in the Greek Dairy industry.” *European Journal of Marketing*, 32:962–973.
- Vlachvei, A. and K. Oustapassidis. 1998. “Advertising, Concentration and Profitability in the Greek Food Manufacturing Industries” *Agricultural Economics*. 18:191–198.

- Oustapassidis, K., and O. Notta. 1997. "Profitability of Cooperatives and Investor-Owned Firms in the Greek Dairy Industry." *Journal of Rural Cooperation* 25(1):33–43.
- Oustapassidis, K., and K. Giannakas. 1996. "Product Development and Conduct in a Competitive Food Market: The Case of the Greek Sausage Industry" Proceedings of the 4th International Conference "Economics of Innovation: The Case of Food Industry", Catholic University of Piacenza, June 10–11, Piacenza, Italy, Physica-Verlag p. 275–294
- Oustapassidis, K. 1995. "The Impact of EU Accession on Exports by Greek Agricultural Co-operatives: An Approach Based on Pooling Time Series and Cross-Sectional Data." *Oxford Development Studies* 23:197–205.
- Oustapassidis, K., A. Sergaki, and G. Baourakis. 1995. "The Economic Development of the Greek Agricultural Marketing Co-operatives", "Stochastic Models and Data Analysis". Kluwer Academic Publishers, Norwell, USA.
- Oustapassidis, K., A. Sergaki., A. Vlachvei., and G. Baourakis. 1995. "Market Shares of Farm Co-operatives in Greece, Before and After Accession to the EC." *Journal of Rural Cooperation* 23:17–29.
- Oustapassidis, K. 1992. "Diversification, Size and Growth of the Greek Co-operative Unions." *European Review of Agricultural Economics* 19:85–96.
- Oustapassidis, K. 1992. "Economies of Scale in Agricultural Marketing Co-operatives: The Case of the Greek Unions." *Journal of Rural Cooperation* 20:127–38.
- Oustapassidis, K. 1988. "Structural Characteristics of the Agricultural Co-operatives in Britain." *Journal of Agricultural Economics* 39:231–42.
- Oustapassidis, K. 1987. "Economic Development and Structure of the Agricultural Co-operative Unions in Greece", Ph.D. Thesis, Oxford University.
- Oustapassidis, K. 1986. "Greek Agricultural Co-operatives: Radical Change or Trend Recognition?", *Oxford Development Studies* 15:216–39.

## TABLE OF CONTENTS

PREFACE .....	xi
I. THE COOPERATIVE: BETWEEN MARKET AND HIERARCHY	
1. Cooperatives: Hierarchies or Hybrids? .....	1
<i>Claude Ménard</i>	
2. The Network Form of the Cooperative Organization – An Illustration with the Danish Pork Industry .....	19
<i>Kostas Karantininis</i>	
3. Networks, Innovation and Performance – Evidence from a Cluster of Wine Cooperatives (Languedoc, South of France).....	35
<i>Yuna Chiffolleau, Fabrice Dreyfus, Rafael Stofer &amp; Jean-Marc Touzard</i>	
II. GOVERNANCE	
4. Conversions and Other Forms of Exit in U.S. Agricultural Cooperatives .....	61
<i>Fabio R. Chaddad &amp; Michael L. Cook</i>	
5. The Structure of Marketing Cooperatives – A Members’ Perspective .....	73
<i>Nikos Kalogeras, J.M.E. Pennings, Gert van Dijk &amp; I.A. van der Lans</i>	
6. Agency and Leadership in Cooperatives – Endogenizing Organizational Commitment.....	93
<i>Murray Fulton &amp; Konstantinos Giannakas</i>	
III. INTERNAL ORGANIZATION	
7. Lock-in of Farmers in Agricultural Cooperatives – Reviving the Effect of Exit by Means of Constitutional Amendments .....	115
<i>Søren Vincents Svendsen</i>	
8. Two Vignettes Regarding Boards in Cooperatives versus Corporations – Irrelevance and Incentives.....	137
<i>George Hendrikse</i>	
9. Regulation, Governance and Capital Structure in Cooperatives.....	151
<i>Anastassios Gentzoglani</i>	
IV. CONDUCT	
10. Cooperative Forward Integration in Oligopsonistic Markets – A Simulation Analysis of Incentives and Impacts .....	169
<i>Jeffrey S. Royer</i>	



11. European Dairy Cooperative Strategies – Horizontal Integration versus Diversity .....	195
<i>Laurence Harte &amp; John J. O'Connell</i>	
12. Sales Distortion in Heterogeneous Cooperatives.....	213
<i>Peter Bogetoft &amp; Henrik Ballebye Olesen</i>	
13. Do Consumers Care about Cooperatives? A Franco-Swedish Comparative Study of Consumer Perceptions .....	225
<i>Jerker Nilsson, Philippe Ruffio &amp; Stéphane Gouin</i>	
V. PERFORMANCE	
14. The Horizon Problem Reconsidered .....	245
<i>Henrik Ballebye Olesen</i>	
15. The Horizon Problem in Agricultural Cooperatives – Only in Theory? .....	255
<i>Erik Fahlbeck</i>	
16. Performance of Cooperatives and Investor-Owned Firms: The Case of the Greek Dairy Industry .....	275
<i>Ourania Notta &amp; Aspasia Vlachvei</i>	

## PREFACE

Some writers argue that cooperative business has existed almost as long as mankind itself, thereby referring to how people in ancient Egypt, Babylonia, China and Greece solved joint problems. People have always experienced advantages by joining forces. However, the formal way of organizing cooperatives is a 19<sup>th</sup> century phenomenon.

The pioneering cooperatives were, however, very different from the cooperative firms of the 20<sup>th</sup> century, not to speak about the cooperatives of the 21<sup>st</sup> century. As the market conditions change the business firms, among them the cooperative enterprises have to adapt. This is an eternal truth.

During the last decade or so, considerable changes have taken place in the market places in the Western countries. The power balance between the manufacturers and the retailers is shifting to the advantage of the latter, as the retail chains are passing through a process of consolidation, globalization, and centralization. The agricultural policies in the Western economies are successively being liberalized. The food processing industry responds to these changes by globalization and extreme large-scale operations.

The cooperatives' adaptation to these changes is presently so extensive and so radical, that one may even get the impression that the pace of change has never been so rapid in cooperative history. The most powerful market strategies demand much capital, and so, new financial solutions are being developed. Likewise, new governance structures are coming. In some cases, newly established cooperatives try to identify market niches to exploit, whereby they often take on unconventional organizational set-ups. Otherwise, the most striking structural change is consolidation, and such of different kinds; mergers, also across national boundaries, alliances with other cooperatives or firms with other ownership structures, acquisitions of other firms, and also organizational forms that seem to be a mixture of cooperative and investor-owned business forms.

The issues hinted at above were the themes of two scientific conferences, organized by the editors of this book. They took place in Bad Herrenalb, Germany, in June 2003, and in Crete, Greece, in September 2004. The theme of both conferences was "Vertical Markets and Cooperative Hierarchies", i.e., the same as the title of the present book. The participants to the two conferences were most of the world's leading scholars on agricultural cooperative business. Hence, it is easy to guess that this book is composed of a number of contributions to the conferences and, in a couple of cases, with contributions from researchers who had intended to participate but were prevented from coming.

The book consists of five parts. The first one, COOPERATIVES BETWEEN MARKETS AND HIERARCHIES, expands the view of the agricultural cooperative business form by adopting the concepts of hybrids and networks. *Claude Ménard* places the cooperative organizational form within the continuum between markets and hierarchies. Cooperatives are viewed as a hybrid form. This opens new

avenues in research about the cooperative organizational form. *Kostas Karantininis* suggests that cooperatives can be regarded as a network, nested conceptually in the market – hybrid – hierarchy continuum. The network of interlocking directorates of the Danish pork industry provides an illustration. *Yuna Chiffolleau, Fabrice Dreyfus, Rafael Stofer* and *Jean-Marc Touzard* map an advisory network of French wine cooperatives, thereby providing arguments for networks' role in innovation and, most importantly, on the participating cooperatives' governance structure.

The second part of the book is devoted to issues of GOVERNANCE. What do cooperatives do when they succeed and when they fail? This is a good starting question when examining governance in cooperatives. *Fabio Chaddad* and *Michael Cook* review exit strategies. They find that mergers and, to some extent, acquisitions are more common among agricultural cooperatives, rather than conversions to IOFs, or liquidations and bankruptcy. Agricultural cooperatives tend to maintain their cooperative structure, whereas cooperative organizations in other sectors more often change their business form or simply dissolve. *Nikos Kalogeras, Joost M.E. Pennings, Gert van Dijk* and *Ivo A. van der Lans* surveyed members of Dutch marketing cooperatives to reveal what kind of a cooperative they desire. The results show a demand for a more market-oriented management and an internal structure closer to an IOF, rather than the traditional proportional type. These two chapters concern management strategies and members' opinions about cooperative structures. *Murray Fulton* and *Konstantinos Giannakas* challenge the view that members' opinions decide the management strategies and the structural characteristics of the cooperative. While members demand high commitment and good performance by hired managers, they themselves may not be committed enough to their cooperative so as to attract and maintain top management performance.

INTERNAL ORGANIZATIONAL ISSUES are treated in the book's third part. *Søren V. Svendsen* adopts a political science approach, arriving at the conclusion that cooperatives should change their constitutional structure to allow for more exiting. This would improve the collective bargaining position of farmers and could potentially control management conduct. *George Hendrikse* seems to challenge this view by showing that the cooperative structure at large might be irrelevant. However, the financial structure might be important in that it limits the ability of rent extracting activities by management. *Anastassios Gentzoglanis* shows that the governance structure of the cooperative is the reason for differential performance between cooperatives and IOFs.

Four papers examine the CONDUCT OF COOPERATIVES. Three distinct strategic choices by cooperatives are analyzed: vertical integration, horizontal integration and product differentiation. Using a standard oligopsonistic model, *Jeffrey Royer* shows that vertical integration is a strategic choice for a cooperative in non-competitive market structures. *Laurence Harte* and *John O'Connell* find that vertical integration does not necessarily result in higher prices for the farmers. Irish dairy cooperatives constitute the empirical basis, and European parallels are drawn. *Peter Bogetoft* and *Henrik Ballebye Olesen* argue that the choice to differentiate products depends on the composition of the membership. If most members are conventional producers it is unlikely that the cooperative will choose to differentiate their product. *Jerker Nilsson, Philippe Ruffio* and *Stéphane Gouin* investigate why only few cooperatives

use the concept of “cooperative” as an element in their branding strategy. They hypothesize that this is so because less scrupulous firms might free-ride if “cooperative” were a positive brand element. After a survey among French and Swedish consumers the authors reject this idea and suggest alternative explanations. The above four studies cast some light on the extent to which cooperatives behave differently from IOFs. Most importantly, they raise questions about the survival of cooperatives as a distinct business form.

The last part of the book focuses on COOPERATIVE PERFORMANCE. The classical question of the horizon problem in cooperatives is dealt with both theoretically and empirically in two papers. By allowing for full equity redemption, *Henrik Ballebye Olesen* challenges the conventional view that the horizon problem leads to under-investment in cooperatives, showing over-investment instead. According to a survey conducted by *Erik Fahlbeck*, cooperative members in Sweden do not consider the horizon problem as a significant impediment to efficient business in their cooperatives. Do cooperatives perform/ behave different than investor-owned firms? *Ourania Notta* and *Aspassia Vlachvei* scrutinize data from Greek dairy firms with different organizational forms. The evidence is clearly in favor of the IOFs. This may be the result of the Greek setting, but it may also indicate a general handicap of the cooperative organizational form.

A large number of researchers adhered to the call for papers to be presented at the two conferences. After screening by the two conference organizers a total of 74 papers were presented at the conferences, as well as 13 posters. Together with a few papers, submitted by researchers who were unable to attend the conferences, the number of potential book chapters amounted to nearly 100. Out of these, the two conference organizers (book editors) selected 24 that should be subject to scrutiny through anonymous peer reviewing. Whenever there was a disagreement between at least one of the two editors and the reviewer the paper was submitted to a third reviewer. Through this process, the 16 chapters, included in this book, were chosen.

The editors are very grateful to a number of skilled researchers who helped with selecting papers and advising the authors to improve the quality of the submissions. The editors, however, remain the residual claimants of any errors and omissions that the authors themselves have not already claimed. The contribution of the following who served as referees is hereby deeply acknowledged:

David Barton, Kansas State University, USA;  
 Niels Blomgren-Hansen, Copenhagen Business School, Denmark;  
 Thrainn Eggertsson, University of Iceland, and New York University, USA;  
 Michael Gertler, University of Saskatchewan, Canada;  
 Geir Gripsrud, Norwegian School of Management, Norway;  
 Werner Grosskopf, University of Hohenheim, Germany;  
 Brent M. Hueth, Iowa State University, USA;  
 Svend Hylleberg, University of Aarhus, Denmark;  
 Saara Hyvönen, University of Helsinki, Finland;  
 Michael Kirk, Philipps-University Marburg, Germany;  
 Peter G. Klein, University of Missouri, USA;  
 Rainer Kühl, University of Giessen, Germany;  
 Carl Johan Lagerkvist, Swedish University of Agricultural Sciences, Sweden;

Ole Øhlenschläger Madsen, University of Aarhus, Denmark;  
S.W.F. (Onno) Omta, Wageningen UR, the Netherlands;  
Lars Otto, the Royal Veterinary and Agricultural University (KVL), Denmark;  
Brian Oleson, University of Manitoba, Canada;  
H. Christopher Peterson, Michigan State University, USA;  
Jörg Raab, University of Tilburg, the Netherlands;  
Bruce L. Reynolds, University of Virginia, USA;  
Roger Spear, Open University, UK;  
Michael E. Sykuta, University of Missouri, USA;  
Angelo Zago, University of Verona, Italy;  
Kim Zeuli, University of Wisconsin, USA.

Thanks are forwarded to John Bird, University of California Berkeley, who has corrected the language of the contributions.

The editors acknowledge, without implication, the funding given by the NORMA OG FRODE S. JACOBSENS FOND. Without its generous support, this book would not have been produced.

Berkeley and Aarhus in May 2006

Kostas Karantininis

Research Professor, Royal Veterinary  
and Agricultural University,  
Copenhagen, Denmark  
Visiting Scholar, University of  
California, Berkeley, USA

Jerker Nilsson

Professor of Cooperative Business,  
Swedish University of Agricultural  
Sciences, Uppsala, Sweden  
Visiting Professor, University of  
Aarhus, Aarhus, Denmark

# CHAPTER 1

## COOPERATIVES: HIERARCHIES OR HYBRIDS?

CLAUDE MÉNARD\*

*Centre ATOM, University of Paris (Panthéon-Sorbonne), France*

**Abstract.** Recent developments in organization theory about arrangements that are neither markets nor hierarchies provide an opportunity to reconsider the nature of cooperatives and their fundamental characteristics. The concept of “hybrids” developed by transaction cost economics to encapsulate the properties of these arrangements may be particularly relevant in that it provides a theoretical framework in which to embed cooperatives among other modes of governance. This paper goes in that direction and proposes a characterisation of different regimes among cooperatives, establishing a typology grounded in theory. An important result of this approach is that it challenges standard competition policies towards cooperatives.

### 1. INTRODUCTION

The importance of cooperatives as a mode of organization cannot be overestimated. In the European Union (as it was in 2000) they represented over 130,000 firms, with more than 2,500,000 employees and 85,000,000 members.<sup>1</sup> They often have a very significant market share, particularly in the agrifood sector (from 30% in France to 83% in the Netherlands), in banks and credit unions (from 25% in the Netherlands to 35% in Finland), and in retailing activities (over 25 millions members in 1996).<sup>2</sup>

Of course, economists have long been aware of that importance. There is substantial literature on cooperatives, and significant contributions have been published recently about changes in their status and the challenges that these changes represent (Cook, 1995). However, and this is somehow paradoxical, there is not much about the nature of cooperatives as modes of organization. In the standard economic literature they tend to be considered as relatively strange animals, in that they depend on an allocation of property rights that do not fit well within the traditional dichotomy between markets (with autonomous and distinct property rights of parties involved in exchange) and firms (with property rights unified within a legally well defined structure). Clearly, cooperatives do not fit well within this framework.<sup>3</sup>

The emergence in the late 1980s and the 1990s of a substantial body of research on organizational arrangements that are neither markets nor hierarchies may provide an opportunity to reconsider the nature of cooperatives and to shed light on some of their major characteristics. It may also help revisiting public policies, particularly

competition policies, in order to reconsider approaches that do not capture the essence of cooperatives, establishing policies that either park cooperatives in a special (favored) status, or want to put them in the same basket as fully integrated firms. Recent debates about the legal status of cooperatives in the European Union illustrate.

The concept of “hybrids” has been proposed, particularly by economists grounding their analyses in transaction costs theory, to encapsulate properties of the family of arrangements that have characteristics significantly distinct from those underlying market exchanges while they also differ substantially from those presiding at the organization of transactions within integrated firms. Therefore, a question naturally comes to mind: would this concept be appropriate for characterizing cooperatives?

In what follows, I explore this question. Section 2 introduces very briefly the theoretical framework underlying the concept of “hybrid” in a transaction cost perspective. Section 3 examines what differentiates hybrid arrangements from integrated firms. Section 4 discusses if these traits suit some fundamental properties observed in cooperatives. Section 5 develops arguments as to why this characterization matters and may challenge existing public policies. Section 6 concludes with a call for more research in this direction.

## 2. ANALYTICAL FRAMEWORK: A SHORT REMINDER

The observation that there exist ways for organizing transactions among economic units that maintain distinct property rights while they share a significant subset of their rights of decision is not new. Without going back to the “industrial district” identified by Marshall (1920), franchising began to attract some attention in the late 1970s (Rubin, 1978; see also Brickley and Dark, 1987). However, it was in the second half of the 1980s and the 1990s that a growing literature, initially based in managerial sciences and sociology, focused on networks and similar modes of arrangements (Thorelli, 1985; for a pioneering survey, see Grandori and Soda, 1995). In my view, the introduction of the concept of “hybrid” by Williamson in 1991 (1996, Ch. 4)<sup>4</sup> represents a major step forward in that it embedded the large set of empirical observations on different arrangements in a theoretical framework that provided an explanation to their existence and gave coherence to their characteristics.

The model Williamson proposed and that I summarize here with some minor changes is based on transaction cost economics, which lies at the core of new institutional economics. A preliminary question that is often raised with that approach and which deserves attention is: Why attach so much importance to transactions? Why use transaction costs as a point of entry for analyzing organizations? Does it mean neglecting, even abandoning the crucial concept of costs of production, thus turning away from the structuring role that technology often plays? Coase (1998) provides an answer, in my view a very convincing one, to this legitimate question. Transactions matter because their organization under different types of arrangements and under the umbrella of institutions that make them more or less easily happen determines the capacity of economic activities to develop and

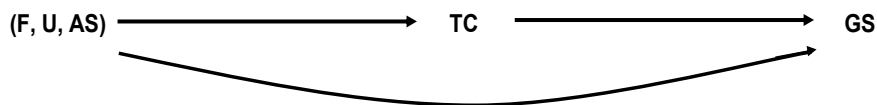
take advantage of the division of labor and of specialization. In that sense, the choice of a mode of organization for arranging transactions, which is the transfer of rights among parties to an activity of production or exchange, is crucial. And costs that result from this choice largely establish, beside the technological factors, how these activities will be structured and, therefore, the turf on which production (and its costs) develops.

As is now well known, Williamson went a step further in the direction opened by Coase, with a contribution that made the transaction cost approach operational. His powerful intuition, which was later developed in a heuristic model (Williamson, 1985, ch. 4; Riordan and Williamson, 1985), is that a few characteristics or “attributes” of transactions, namely their frequency (F), the uncertainty (U) surrounding their arrangement, and the specific investments (AS) they require, determine their costs. This relationship between transaction costs and the attributes of transactions can be expressed functionally as:

$$TC = f(F, U, AS)$$

- + +

with signs indicating the direction in which transaction costs vary when the related variable increases. The next step in building the model consists of linking the choice of a mode of governance (GS) to these costs and, therefore, implicitly to the attributes of the transactions at stake. We can summarize these links in Figure 1:



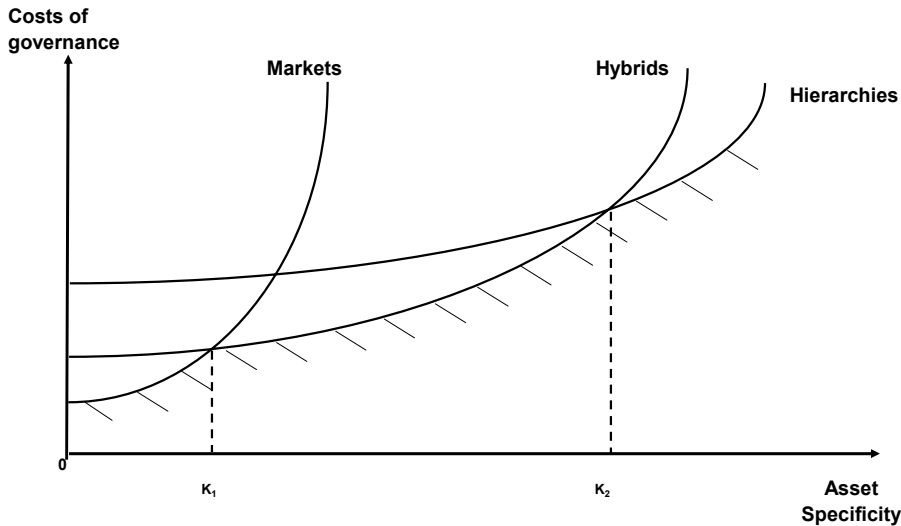
*Figure 1. Relationship between characteristic, costs, and governance of transactions*

Under some simplifying assumptions, particularly the idea that in choosing a mode of governance, agents intend to minimize their costs, Williamson expressed these relationships in what is often called the heuristic model, explaining the trade-off between organizing a transaction within the firm (“hierarchy”) and relying on markets for doing so.

A few years later (Williamson, 1991 [1996, ch. 4]), he extended the model in order to encapsulate organizational arrangements that were neither hierarchies nor markets, and labeled them “hybrids”. Taking the specificity of assets (or investment) as the key variable that explains the choice among alternative modes of organization (a proposition already substantiated by several econometric tests: see a review in Joskow, 1988), he developed an analysis in which increasing costs of governance for market transactions leaves the way to interfirm agreements before ending up in vertical integration when mutual dependence becomes so strong that it puts these agreements at too high a risk.<sup>5</sup> Since the model is now well known, I do not reiterate its details here. I stick to its geometric representation, summarized in Figure 2, in



which the trade-off between the three alternative modes of organization is indicated in bold lines, with the lower envelope showing the most adapted mode for the corresponding level of investments specific to the transaction(s) at stake.



*Figure 2. Modes of governance. Source: adapted from Williamson, 1996, p. 108*

Based on propositions derived from this model, hundreds of tests have been published, most of them supporting the predictions made by the theory (for surveys and discussions, see Joskow, 2005, and Klein, 2005). However, in order to go further and to provide a full explanation of why one mode of organization is preferred over another for certain transactions,<sup>6</sup> it is necessary to make one more step and explore the internal characteristics of these different modes. In other terms, their respective advantages (and costs) must be assessed. From a technical point of view, this comparative approach raises important difficulties (Gibbons, 2003; Joskow, 2005). One condition it must fulfill is the careful examination of the properties of each mode along lines that allows comparisons. Initial progress in that respect focused on firms (see Ménard, 2005a). More recent research have contributed to a better knowledge of some basic properties of hybrid arrangements. In order to discuss whether cooperatives belong to that mode of organization or not, I now turn to a review of some of these distinct properties.

### 3. WHAT DIFFERENTIATES HYBRIDS FROM HIERARCHIES?<sup>7</sup>

At first sight, the arrangements that have been identified as “hybrids” in the literature form a strange collection. They extend from subcontracting to franchise systems, collective trademarks, partnerships, alliances, and so forth. The vocabulary itself tends to reflect this uncertain state of affairs: beside hybrids, which is the term I use in what follows because it refers to a well defined theoretical framework (see above), we find more descriptive expressions such as “symbiotic forms”, “clusters”, “supply chain”, “networks”. However, notwithstanding the apparent heterogeneity of this “bestiary”, the combination of a transaction cost perspective with what we have learned from the empirical literature delineates some fundamental properties.

The central characteristic of hybrids is that they maintain distinct and autonomous property rights and their associated decision rights on most assets, which makes them different from integrated firms; however, they simultaneously involve sharing some strategic resources, which requires a tight coordination that goes far beyond what the price system can provide and thus makes them distinct from pure market arrangements. The former aspect translates into the legal status of hybrids: parties to these arrangements hold decision rights in last resort. The later aspect translates into common governance for a more or less significant segment of activities of the partners involved: hybrids look like a coalition of interests. This mix of autonomy and interdependence defines the three pillars of hybrids: they pool resources, they coordinate through contracts that provide a framework, and they combine competition with cooperation. Let me briefly review these three complementary dimensions.

#### *Three complementary dimensions*

Whatever the form hybrid arrangements take, they implement forms of interdependence through joint investments. Keep in mind the example of franchising. Hybrids develop because markets are perceived as unable to adequately bundle the relevant resources and capabilities while integration would reduce flexibility and weaken incentives. Looking for rents provides the foundation for accepting the mutual dependence created through investments specific to the relationship, whether these specific assets consist of equipment, human capabilities, or a brand name. However, this pooling of resources is restricted to specific transactions and concerns only some of the assets owned by the parties. Several consequences and problems follow. First, choosing partners is a key issue. Hybrids are selective, not open systems: partners’ identity matters. Second, the complexity of decomposing tasks among partners and of coordinating across organizational boundaries requires joint planning and governance for monitoring the agreement. Third, the existence of an adequate information system among parties accepting to pool part of their resources is central to the survival of hybrids.<sup>8</sup> However, the inevitable asymmetries among partners maintaining autonomous rights and the risks of capture of some strategic information periodically threaten the continuity of the relationship.

To summarize, pooling resources in hybrids requires that partners accept losing part of the autonomy they would have in a market relationship without benefiting

from the capacity to control that a hierarchy could provide. Hence a first problem for hybrids is: how can they secure the coordination of interdependent investments without losing the advantages of decentralized decisions?

This problem is partially solved through contracts. Relational contracting provides a framework for creating “transactional reciprocity”. The resulting cooperation carries advantages but entails risks. Advantages can be expected from extended market shares, transfer of competencies, and sharing scarce resources (for example, financial ones). However, contracts are incomplete and subject to unforeseeable revisions since they contribute to organize transactions involving specific investments that are often plagued by uncertainties (for example, joint investments in R&D projects). We have a typical transaction cost problem here. Contrary to what agency theory predicts, the features of contracts are not continuously refined in order to obtain an “optimal contract” that would encapsulate all required adaptation. As shown by recent studies on franchising (Lafontaine and Shaw, 1999), contracts are not tailored to suit the exact characteristics of transactions at stake. Plainly, this would be too costly and the source of too many rigidities. Rather, contracts provide a relatively simple and uniform framework. Hence, a second problem that is recurring among hybrids: what governance to adopt for securing contracts against opportunistic behaviors while minimizing costly or even impossible renegotiations?

This difficulty is amplified by the importance of competitive pressures, which comes from two sources. First, partners in hybrid agreements often compete against each other on segments of their activities. This can take different forms. The agreement can have provisions that recurrently make partners competing, as in subcontracting. Notwithstanding restrictions (geographical, etc.), hybrids may have overlapping strategies, for example, they may target customers from the same subset. Parties may also cooperate on some activities, such as joint R&D projects, and compete on others. Second, hybrids usually compete with other modes of organization, including other hybrids. The standard neoclassical explanation of hybrids as rent seekers shows its limits here. Hybrids tend to develop in highly competitive markets in which pooling resources is viewed as a way to deal with significant uncertainties and survive. However, this competitive environment may have a highly negative side effect for hybrids: if joint investments required in an arrangement are moderately specific, partners may be tempted to switch among arrangements, making them highly unstable. Again, the implementation of an internal mode of regulation and control is a key issue. Hence a third problem for hybrids is: what mechanism can be designed for efficiently disciplining partners and solving conflicts while preventing free-riding?

These three dimensions clearly suggest that there are important regularities underlying the apparent heterogeneity of hybrids. These regularities are rooted in the way partners are dealing with the mutual dependence created by the specificity of some of their investments; by the need to guarantee some continuity in their relationship and, therefore, the frequency of transactions at stake; and by the importance of containing contractual hazards and reducing uncertainties. They do so with the mix of competition and cooperation that characterizes and plagues hybrids. Because they cannot rely on prices or on hierarchy to discipline themselves, partners

need specific devices for dealing with the problems identified above. What are these mechanisms and what is the logic behind the choice of specific ones?

#### *Variety in governance*

Hybrid arrangements develop when specific investments can be spread over partners without losing the advantages of autonomous decisions, while uncertainties are consequential enough to make pooling an advantageous alternative to markets. However, the combination of specific assets and consequential uncertainties generates risks of opportunistic behavior and miscoordination. If only one aspect (or attribute) is present, the governance leans towards contract-based arrangements, close to a market form. When the two attributes combine, the governance becomes much more authoritarian. Therefore, I submit that *it is the combination of opportunism, or the risk of opportunism, and of miscoordination, or the risk of miscoordination, that determines the governance characterizing hybrids*. Let me develop briefly before applying this proposition to the analysis of cooperatives.

One way to deal with the three problems identified in the previous subsection is to rely heavily on contracts. A well known mechanism for disciplining partners while facilitating coordination is the contractual embedment of restrictive provisions. Restrictions delineate the domain of action of partners, limiting their autonomy and identifying areas in which collective decisions must prevail. There is an abundance of literature on vertical restrictions, much less on horizontal ones. The emphasis is usually on their consequences on prices and how it can distort competition. This interpretation misses what is often the main goal of these provisions – to restrict free-riding while facilitating coordination. This point was made 20 years ago by Williamson (1985, pp. 183–189) on the Schwinn case. It has been largely substantiated, for example by numerous studies on supply chain systems, particularly in the agrifood sector in which traceability and quality control have become major issues (Ménard and Valceschini, 2005). This role of contractual restrictions as an efficient tool of governance remains underexplored. However, we already know enough to be aware of the limits of contracts in that respect. First, restrictive provisions often produce conflicts among parties, particularly with respect to their interpretation. Second, they generate suspicion among competition authorities who see them as sources of collusion. Third, their allocation effects are difficult to evaluate and monitor, so partners tend to rely on other mechanisms.

The tension between contractual hazards and the expected gains from investments in interdependent assets provides strong incentives to turn to more powerful modes of coordination than market-based contracts. This is what our theoretical framework predicts. However, we have to go a step further and check if our model can help understanding the specific forms this coordination takes. Using several empirical studies, including some I have been associated with, I have submitted in several papers (Ménard, 1996; 1997 [2005]; 2004) that hybrid organizations tend to produce specific modes of internal governance, which I have suggested be called “authorities” to emphasize their difference from “hierarchies”. These devices provide the cornerstone in the architecture of hybrids. Their main characteristic is

the pairing of the autonomy of partners with the transfer of subclasses of decisions to a distinct entity in charge of coordinating their actions. The presence of hierarchical elements in contractual agreements has been noted before (Stinchcombe 1990, chap. 6). However, what I want to emphasize here is the existence of specific organizational devices intentionally designed by partners for monitoring their network and for controlling their actions. The authority transferred to these devices involves intentionality and mutuality, maintaining some symmetry among participants.

Empirical studies suggest that the more or less centralized power of these authorities depends on the degree of mutual dependence among partners and on the complexity and turbulence of the environment in which a hybrid monitors transactions. Let me illustrate with two polar cases. Raynaud [1997] studied a group of millers who created a brand name for high-quality bread in France. Members of this arrangement use only selected wheat from which they produce first rank flour that they dispatch to franchised bakers that agree to strict rules. However, there are risks of opportunistic behavior among partners. First, they may be tempted to free-ride in delivering lower quality flour. Second, some millers are competing: they supply the same geographical area and have a strong incentive to attract as their customers as many bakers as possible. In order to monitor this arrangement, complex internal governance has been implemented. Requirements regarding the inputs, quality control, and the monitoring of contracts are delegated to an autonomous entity, created by the millers and that owns the brand name. The millers have also created an internal “court”, with delegates operating as private judges for solving conflicts. In this stylized case, the hybrid arrangement coordinates partners who are on a par. Sauvée [2002] has exhibited a very different model with a significant asymmetry among partners. In the case he studied, a private firm has developed a brand name of canned vegetables of high quality. Inputs are provided by farmers under contracts that contain detailed requirements and provisions. So far, this is quite standard. The interesting point is that because of its success the firm was rapidly confronted to the high transaction costs of monitoring thousands of contracts and farmers. In order to solve this problem, a complex organization was implemented, with growers grouped in several distinct arrangements delegating the negotiation of contracts and the numerous adjustments they require to a joint committee. Surprisingly, this powerful committee was formerly dominated by the growers with four delegates, while the firm has two representatives. It plays a key role, filling the blanks in the contracts, organizing transactions, and negotiating the distribution of quasi-rents.

Numerous variations of such arrangements could be described. They all substantiate the idea that hybrid organizations have architecture of their own, distinct from markets or hierarchies. At one end of the spectrum, close to markets, hybrids rely on trust. Decisions are decentralized and a loose coordination operates through mutual “influence” and reciprocity. The resulting relationship is not purely informal: it tends to be highly codified in order to guarantee continuity in the transactions and is often in the hands of key players. Palay (1985) has provided a pioneering study in that respect, showing the role of dedicated managers in charge of monitoring agreements among partners in the rail freight sector. At the other end of the spectrum, some hybrids are close to a hierarchy. Parties keep legally distinct property

rights and may even compete on segments of their activities. However, a significant domain of decisions is coordinated through a quasi autonomous entity, which operates as a private bureau with attributes of a hierarchy. Joint ventures provide an illustration. Between these polar cases, other forms of “authority” develop. “Relational networks” have been extensively analyzed by sociologists and scholars in organization theory. Because of the significance of contractual hazards they confront, these arrangements need tighter coordination and control than trust, with formal rules and conventions framing the relationships among partners. Examples have been studied by Greif (1993) and Powell (1996), among others. When uncertainty is even more significant and interdependent assets more important, more constraining structures of governance develop, often under the leadership of one party. The pioneering study of Eccles (1981) on the construction industry provides a good illustration, with one firm establishing its authority either because it holds specific competences or because it occupies a key position in the sequence of transactions.

To summarize, hybrid arrangements tend to develop specific modes of governance with significant variances in the degree of control over partners, depending on the degree of uncertainty and the nature and degree of specific investments required by the transactions at stake. If we come back to Figure 1, these forms correspond to those associated to values between  $K_1$  and  $K_2$ , with an increasing intensity in the centralization of their governance.

#### 4. CAN COOPERATIVES BE UNDERSTOOD AS HYBRID FORMS?

I now turn to a most difficult question: is this analysis relevant to better understand cooperatives? The question is challenging for at least two reasons. First, there is so much diversity among cooperatives that finding a unified theoretical framework for explaining this diversity and encapsulating the various properties of the arrangements involved is not an easy task. Second, and above all, I am not at all a specialist on cooperatives. In what follows, I rely heavily on contributions from colleagues who are much more knowledgeable than I am, particularly Cook (1995), Cook, Chaddad and Iliopoulos (n.d.), Hendrikse and Veerman (2001), Hendrikse and Bijman (2002), as well as on discussions with participants at the Chania Conference.<sup>9</sup> Therefore, the exploration proposed in this section is very tentative.

In order to discuss the question of whether or not cooperatives are hybrids, I refer to the characteristics identified above.<sup>10</sup> Let us start with the central issue of the status of property rights and their relationship to decision rights. In that respect, there is a wide variety of arrangements among cooperatives. At one end of the spectrum, close to market relationships, we have cooperatives in which property rights and decision rights are separated. In this case, cooperators formerly hold “shares” in a cooperative and receive benefits according to its performance. They behave very much like small shareholders operating through financial markets, with very little control over the governance of the cooperative. Retailing and marketing cooperatives are often of that type. They process and sell products through market-type relationships; those buyers who are cooperators have very little or no control

over the governance. Hence, decision rights are largely isolated from property rights: one can consider that cooperators in such cases are related to the cooperative through quasi-market forms of contracts. At the other end of the spectrum, we have cooperatives owned and governed by their shareholders, as is often the case with cooperatives grouping producers (or growers in agriculture). This type of arrangement tends to coordinate tightly the activities of its members, deciding the variety of goods or services, fixing quantities to be produced, negotiating with potential buyers, etc. The example of *Savéol*, which provides an umbrella to three cooperatives and dominates the market for fresh tomatoes in France, is a case in point (Sauvée, 1997; Ménard and Valceschini, 2005). Cooperatives with close membership or that are quasi-integrated fall into this category. We are almost in the case of classical hierarchies (Bonus, 1986). Between these polar cases, we find a large number of cooperatives, particularly the traditional, multipurpose cooperatives that coordinate a network of partners, most of them being cooperatives themselves that maintain the autonomy of their property and decision rights. For example, *Cana*, a French cooperative that operates in the poultry sector, covers a network of cooperative-partners from growers to chicks and food suppliers as well as slaughterhouses. Obviously the internal mode of governance of these widely distinct arrangements varies significantly, depending on closeness between the allocation of property rights and the allocation of decision rights. However, almost all cooperatives share something that makes them different from integrated firms as well as from pure market relationships: the one-person, one-vote rule, whatever the size of one's contribution.<sup>11</sup> This is a characteristic they share with many hybrid arrangements, in which decision-making rights are allocated on a par. (See the example of the millers in Section 3.)

Let us now turn to the three dimensions that I have identified as pillars of hybrid arrangements, in order to exhibit what properties are shared or not by cooperatives. (1) *Pooling resources*. This is surely an aspect which is one of the fundamental motivations for organizing cooperatives. However, it exists with very variable intensity, so that mutually dependent investments are more or less consequential. What theory predicts in these circumstances is that the degree and importance of specific assets shared by cooperators should determine the intensity in selectivity of members as well as the intensity in control over their activities. (2) *The significance of contracts* among cooperators (to the exclusion of contracts with outside partners). Again, the intensity of contracting varies widely according to the type of cooperatives. Contracts tend to be particularly detailed, with important provisions and sanction clauses in cooperatives that need to tightly coordinate the actions of their members and/or that must strictly control quality, as with growers or dairy milk cooperatives. They are much less specific and can even be almost pure formalities when it comes to agreements among members with no idiosyncratic investments in the cooperative, as with retailing and marketing cooperatives. Again, our theoretical framework allows making predictions about the characteristics of contracts depending on the specificity of assets that cooperators are pooling; for example, duration of contracts should be much shorter in the later case while in the former case they are either long term, or short term and automatically renewable. (3) *Competition conditions*. They also change significantly according to the type of cooperatives.

The need to tightly control free-riding, when specific assets are at stake, and to restrain the autonomy of decisions of partners when the reputation of the whole depends on respect for requirements by each party to the agreement, seriously reduces competition among members. In these situations, tight coordination through formal governance prevails, while competition among members is much more frequent in market-oriented cooperatives that monitor weakly specific assets, that is, assets easily redeployable from one type of activity to another.

Based on these casual evidences that need to be substantiated and tested by the specialists in the field, our model suggests the following application of the arrangements identified in Figure 2 to various types of cooperatives (See Figure 3).

If we take the degree of specificity of investments made by cooperators in their cooperative as a key variable (uncertainty should be added in a more developed model), transaction cost theory predicts that costs of governance tend to increase with the increase in asset specificity, but at a different rate according to the organizational arrangement, with the costs of using markets increasing more rapidly than hybrids which also increases more rapidly than hierarchies when investments connected directly to the relationship become significantly more idiosyncratic. When it comes to cooperatives what this means is that the more easily redeployable assets are held by cooperators in their cooperative, and the closer we are to market arrangements, as with retailing or marketing cooperatives. Symmetrically, the more specific to the transactions organized by a cooperative are the assets detained by cooperators, the tighter the coordination should be, bringing into the arrangement a form of governance that is very close to full integration. Different modes of organizing cooperatives fall in between, as suggested by Figure 3. And there are cases when investments are so specific to the transactions monitored by the cooperative that it is structured and governed very much like a classic integrated firm.

This suggested typology obviously needs to be discussed and tested. The emphasis on the degree in the specificity of investments for determining the mode of hybrid governance must be substantiated by theoretical arguments and must be assessed through empirical studies. Moreover, uncertainty is certainly another key variable in organizing transactions that should be introduced in the model. The advantage of focusing on the variable “specific investments” is that it puts at the forefront of the analysis of cooperatives the interdependence between the degree of selectivity in membership and the intensity required in the control of decision rights on one hand, and the importance of the degree of coordination needed on the other hand, in order to determine the mode of governance that can efficiently monitor the type of transactions at stake. More importantly, it provides a theoretical framework for examining and classifying cooperatives, which allows predictions that can be tested and challenged.



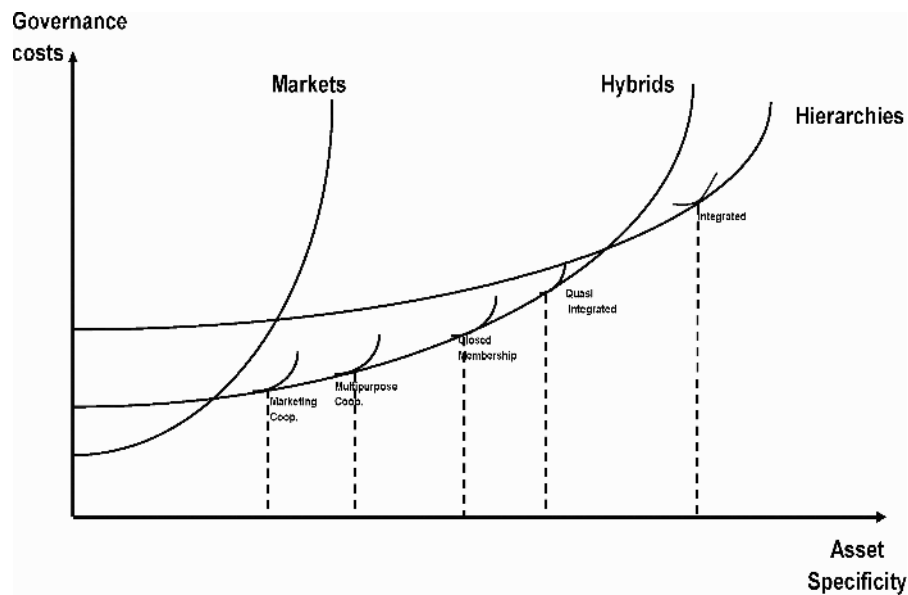


Figure 3. Modes of governance among cooperatives

#### 5. WHY DOES IT MATTER?

It is legitimate to question why the development of this approach to cooperatives should matter. My answer is twofold: it might be highly relevant, for positive as well as for normative reasons. I am mostly emphasizing the second aspect here.

On the positive side, the examination within a well defined theoretical framework of factors that determine the mode of governance of cooperatives should help understanding better their differentiated characteristics and properties. More precisely, finding a model that allows characterizing the nature and variety of the different modes of organization that exist among cooperatives should provide important insights for understanding why one form emerges and predominates for certain types of activities. The transaction cost approach developed in the previous sections might shed light on two important issues: What are the attributes of transactions a cooperative wants to organize that can explain why a specific arrangement fits these attributes better than another one? And what makes organizing transactions among cooperators more adequate, and therefore more successful, than using market relationships or integrating within a unified firm?

Referring to adequate concepts for answering these questions may also have important consequences in a normative perspective. If there is economic explanation, grounded in solid theory, why do so many cooperatives have the characteristics of hybrids, and why among the variety of hybrid arrangements do cooperatives adopt specific forms and choose different modes of governance? The answers may provide indications about what type of cooperative should be chosen for organizing specific types of transactions.

Adequate answers to the questions raised above also involve policy issues. If a substantial subset of cooperatives are hybrid arrangements that exist because they provide the most relevant arrangement for the type of transactions they are organizing, and if this capacity to arrange these transactions efficiently depends, under identifiable conditions, on the implementation of mechanisms of coordination, control, and discipline over the members involved, the resulting governance may challenge standard competition policies. This brings into the picture the ongoing debate about the status of cooperatives that should prevail in the European Union.<sup>12</sup>

Standard competition policies are based on a theory of competition grounded in the dualism between markets and firms (“hierarchies”). In principle, firms are allowed to freely develop their activities so long as they conform to some “rules of the game”, mainly: (i) they respect certain principles in their interactions, a major principle being that they do not build coalitions (rule #1); and (ii) their activities do not threaten “normal” market structures, that is, structures that guarantee the continuity of competition. Therefore, developing strategies that generate market power over a certain threshold is prohibited (rule #2). Confronted with these benchmarks, most cooperatives (with the possible exception of retailing cooperatives) represent a challenge to the two basic rules, particularly rule #1. Indeed, they clearly form a coalition of legally autonomous actors. And they often do so in order to capture part of the market. An important consequence, now argued in many instances of the European Union, is that with respect to the theory in which competition policies are grounded, cooperatives are anomalies tolerated for political reasons, but that sound economic policies should prohibit.

This way of positing the problem tends to ignore the very reason why there exist non-standard arrangements like cooperatives and, more generally, hybrid forms. In Sections 2 and 3, I have explained why, in a transaction costs perspective, modes of organizing transactions legitimately develop that are based on neither market relationships nor hierarchy, and why these modes tend to adopt inter-firms or inter-units coordination that impose some discipline and constraints on parties to the agreement. What happens when competition policies are implemented that ignore the ‘raison d’être’ of these non-standard arrangements? What are the consequences of ignoring the logic that explains hybrids in terms of minimization of transaction costs? Let me briefly discuss the issue through two stylized examples.<sup>13</sup>

First, what happens if arrangements of the hybrid types are prohibited, for example, to the motive that they represent a coalition of independent actors? If we refer to Figure 2, this means suppressing hybrids, so that the lower envelope of the curve corresponding to the degree of specific investments in the domain  $[K_1, K_2]$  is eliminated. The result is that transactions are organized either under market arrangements (when assets have a specificity lower than  $K_1$ ) or within integrated firms (when specificity of assets involved is higher than  $K_1$ ). This means that costs of governance for the entire domain defined by  $[K_1, K_2]$  are higher than they would have been if hybrids would have been allowed. Higher social costs result.

A second stylized example corresponds to a situation in which competition authorities (or other public entities) who do not properly understand the role of hybrids in a competitive environment would impose specific restrictions on their activities (that is, restrictions that are not imposed on market transactions nor on transactions

that are organized by a firm, for example, regarding advertising). Such constraints translate into higher costs of governance for hybrids, which shifts their representative curve upwards. As a result, there may be more room for market transactions on the left side ( $K_1$  is moved slightly to the right), and there is much more room for transactions organized under the umbrella of integrated firms ( $K_2$  is moved to the left). The consequence is that an entire area in which transactions could have been advantageously arranged by hybrids are now transferred to less efficient modes of organizations. Again, social costs result.

To summarize, the ignorance of the specific nature of cooperatives or, more generally, of hybrid arrangements have important consequences that are misunderstood and need further exploration. This is a typical example of how the institutional environment may have a substantial impact on what modes of organization are chosen and on the consequences of these choices on economic efficiency and social welfare.

## 6. CONCLUSION

This paper has explored some properties of cooperatives in the light shed by a new institutional approach, with the conceptual apparatus of transaction costs at the core. There are three main messages from this very preliminary examination.

First, we need a theoretical framework for understanding much better the nature of cooperatives. The standard neo-classical approach that captures the essence of organizations through a production function performs very poorly in that respect. Similarly, the principal-agent approach does not explain why cooperatives exist and the specific forms they adopt. On the other hand, recent developments in transaction costs economics suggest very fruitful perspectives and provide powerful tools for going further in that direction.

Second, there are strong incentives for studying more carefully the observable characteristics of cooperatives in terms of modes of governance. On the positive side, it may help us understand why and when certain modes are preferred to others. On the normative side, it may suggest ways of determining which forms should be chosen, or should be modified in what direction, in order to fit with the properties of transactions that need to be organized.

Third, the analysis developed above suggests that there is an urgent need for policy makers and for competition authorities to introduce transaction costs issues in their reasoning. It is no more possible to build policies and regulation based on the simplistic trade-off between markets and integrated firms. And using in a rather scholastic way provisions of political arrangements, like article 81 of the Rome Treaty, to justify derogations in favor of hybrids and related arrangements cannot be considered satisfying anymore. Indeed, recent theoretical developments suggest that hybrids and similar arrangements are not “derogatory” – they are at the very heart of a dynamic market economy. In that respect, the theoretical and political status of cooperatives should be reexamined in a much more positive perspective.

## NOTES

- \* I would like to thank Michael Cook, George Hendrikse, Kostas Karantininis, Jerker Nilsson, and participants to the Chania Conference on “Vertical Markets and Cooperative Hierarchies: The Role of Cooperatives in the International Agri-Food Industry” for the incentives they provided, the information they delivered, and the comments they shared with me. I alone remain responsible for errors and/or misleading ideas.
- <sup>1</sup> These data are from 1996 and have been published in “Statistics and Information on European Cooperatives.” International Cooperative Alliance, Geneva, December 1998.
- <sup>2</sup> Rapport Annuel du Conseil Supérieur de la Coopération, Paris, 2000, pp. 120–121
- <sup>3</sup> This discrepancy was already noted by Alchian and Demsetz (1972) and is also discussed by Hansmann (1988). However, Cook *et al.* (n.d.) note that there is an increasing interest for organizational issues in the study of cooperatives in the post-1990 period (see their observation 4, p. 23).
- <sup>4</sup> Actually the notion of hybrid was already at work in Williamson (1985) but was considered a transitory and relatively unstable mode of organization. For an analysis of Williamson’s evolution on this, see Ménard (2005c).
- <sup>5</sup> Contractual hazards increase when specific investments create mutual dependence because of an underlying assumption (explicitly made): agents tend to behave opportunistically and to take advantage of this dependence.
- <sup>6</sup> That is, how is it that hybrids or integrated firms can monitor contractual hazards better than markets when there are more specific investments and/or more uncertainty?
- <sup>7</sup> This section draws from Ménard (2004).
- <sup>8</sup> Hybrids have even been qualified as “*a cooperative game with partner-specific communication*” (Grandori and Soda [1995] p. 185).
- <sup>9</sup> “Vertical Markets and Cooperative Hierarchies”, Chania (Crete), September 3–7, 2004. Several contributions to this conference are included in this book. Cook *et al.* (n.d.) review several papers, explicitly focusing on three alternative interpretations of cooperatives, as firms, as coalitions, and as a nexus of contracts. Several aspects of their analysis overlap with mine, although there are also significant differences.
- <sup>10</sup> In looking at cooperatives as hybrids, I adopt a distinctly different view from Bonus (1986), who considered cooperatives as pure business enterprises, as well as from Staatz (1989), who looked at cooperatives from a pure agency perspective.
- <sup>11</sup> There are exceptions to this general rule, which is one of the reasons why the status of cooperatives as distinct from firms is challenged. For an analysis of these changes in ownership status, see Hendrikse and Veerman (2001).
- <sup>12</sup> The issue is also debated in the U.S., although to my knowledge the Capper-Volstead Act has not really been challenged so far.
- <sup>13</sup> The following analysis is developed extensively in Ménard (2005b), with specific examples provided by recent decisions of competition authorities.

## REFERENCES

- Alchian, A.A. and H. Demsetz. 1972. “Production, Information Costs and Economic Organization.” *American Economic Review* 62(5):777–795.
- Bonus, H. 1986. “The Cooperative Association as a Business Enterprise: a Study in the Economics of Transactions.” *Journal of Institutional and Theoretical Economics* 142(3):310–399.
- Brickley, J. A. and F. H. Dark. 1987. “The Choice of Organizational Form: the Case of Franchising.” *Journal of Financial Economics* 18(2):401–420.
- Coase, R. H. 1998. “New Institutional Economics.” *American Economic Review* 88(2):72–74.
- Cook, M.L. 1995. “The Future of US Agricultural Cooperatives: A Neo-institutional Approach.” *American Journal of Agricultural Economics* 77:1153–1159.
- and C. Iliopoulos. 2000. “Ill-defined Property Rights in Collective Action: The Case of US Agricultural Cooperatives.” In C. Ménard, ed. *Institutions, Contracts and Organizations. Perspectives from New Institutional Economics*. Cheltenham: E. Elgar, pp. 335–348.

- , F. R. Chaddad, and C. Iliopoulos. n.d. “Advances in Cooperative Theory since 1990: A Review of Agricultural Economics Literature”. Working Paper, University of Missouri-Columbia.
- Eccles, R. 1981. “The Quasifirm in the Construction Industry.” *Journal of Economic Behavior and Organization* 2(4):335–357.
- 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(4):753–797.
- Grandori, A. and G. Soda. 1995. “Inter-firm Networks: Antecedents, Mechanisms and Forms.” *Organization Studies* 16(2):183–214.
- Greif, A. 1993. “Contract Enforceability and Economic Institutions In Early Trade: The Maghribi Traders.” *American Economic Review* 83(3):525–547.
- Hansmann, H. 1988. “The Ownership of the Firm.” *Journal of Law, Economics and Organization* 4(2) :267–304.
- Hendrikse, G.W.J. and C.P. Veerman. 2001. “Marketing Cooperatives: An Incomplete Contract Perspective.” *Journal of Agricultural Economics* 52(1):53–64.
- and W.J.J. Bijman. 2002. “Ownership Structure in Agrifood Chains: The Marketing Cooperative.” *American Journal of Agricultural Economics* 84(1):104–119.
- Joskow, P. 1988. “Asset Specificity and the Structure of Vertical Relationships.” *Journal of Law, Economics and Organization* 4(1):95–117.
- . 2005. “Vertical Integration.” In C. Ménard and M. Shirley, eds. *Handbook of New Institutional Analysis*. Springer, pp. 319–348.
- Klein, P. 2005. “The Make-or-Buy Decisions. Lessons from Empirical Studies.” In C. Ménard and M. Shirley, eds. *Handbook of New Institutional Analysis*. Springer, pp. 435–464.
- Lafontaine, Francine and Kathrin Shaw (1999) “The Dynamics of Franchise Contracting: Evidence from Panel Data.” *Journal of Political Economy*. 107:1041–1080.
- Marshall, A. 1920. *Principles of Economics*. 8th ed. London: MacMillan. Reprint 1969
- Ménard, C. 1996. “On Clusters, Hybrids and other Strange Forms. The Case of the French Poultry Industry.” *Journal of Institutional and Theoretical Economics* 152(1):154–183.
- . 2004. “The Economics of Hybrid Organizations.” *Journal of Institutional and Theoretical Economics* 160(3):345–376.
- . 2005a “A New Institutional Approach to Organization.” In C. Ménard and M. Shirley, eds. *Handbook of New Institutional Analysis*. Springer, pp. 281–318.
- . 2005b. “The Inadequacy of Competition Policies: A New Institutional Approach.” In M. Oppenheimer and N. Mercuro, eds. *Law and Economics: Alternative Economic Approaches to Legal and Regulatory Issues*. New York: M.E. Sharpe, pp. 27–54.
- . 2005c. “Oliver Williamson and the Economics of Hybrid Organizations.” in M. Augier, J. March and D. Teece (eds.), *Title not yet determined*, Oxford: Oxford University Press, in press.
- . 1997/2005. “Le Pilotage des Formes Organisationnelles Hybrides”, *Revue Economique* 48(2):741–751. English translation: “The Governance of Hybrid Organizational Forms.” In C. Ménard, ed. *The International Library of New Institutional Economics*. Cheltenham: Edward Elgar, vol. IV, pp. 105–113.
- and M.M. Shirley. 2005. *Handbook of New Institutional Economics*, Berlin-Boston-Dordrecht-New York: Springer.
- Ménard, C. and E. Valceschini. 2005. “Institutions for Governing Agriculture and Rural Areas.” *European Review of Agricultural Economics*, in press.
- Palay, T.M. 1985. “Avoiding Regulatory Constraints: Contracting Safeguards and the Role of Informal Agreements.” *Journal of Law, Economics, and Organization* 1(1):155–175.