EUI Working Papers

LAW 2010/19
DEPARTMENT OF LAW

INTER-FIRM NETWORKS IN THE EUROPEAN WINE INDUSTRY

Fabrizio Cafaggi and Paola Iamiceli (Eds.)

EUROPEAN UNIVERSITY INSTITUTE, FLORENCE
DEPARTMENT OF LAW

Inter-firm Networks in the European Wine Industry

FABRIZIO CAFAGGI AND PAOLA IAMICELI (EDS.)

EUI Working Paper **LAW** 2010/19

ISSN 1725-6739

Printed in Italy
European University Institute
Badia Fiesolana
I – 50014 San Domenico di Fiesole (FI)
Italy
www.eui.eu
cadmus.eui.eu

Acknowledgements

We wish to thank all colleagues, entrepreneurs, representatives of local, national and international institutions, professionals and professors who have contributed to enrich issues and contents of this research. Special thanks go to Eugenio Pomarici for the attention devoted to this project during seminars, conferences and additional fruitful discussions and for accepting the proposal of presenting his concluding remarks to this paper. We particularly thank Sandro Boscaini, Andrea Sartori and Bruno Trentini for the constant dialogue animating and enriching the research design and development. Discussion and dissemination of preliminary results received the important support of the European Social and Economic Committee in terms of hospitality, organization and participation to discussion as conducted during an international conference held in Brussels in March 2010; as regards to this event and the more general contribution to the research dissemination at the European and international level, special thanks go to Ottavio Cagiano (Federvini), Federico Castellucci (OIV), Jean-Pierre Faure (EESC), Josè Ramon Fernandez (CEEV), Lamberto Vallarino Gancia (CEEV) and, for unique assistance and support, to Ana Aguado (EUI).

For the intense commitment into the research activity during the conduction of the case studies we also thank Chiara Ferrari, who could not take part into the final stage of the results' elaboration and dissemination.

For the Portuguese report we would like to thank Jorge Castela and Joana Farrajota for their valuable work in the first stages of the research.

A special thank to all general coordinators of the European research and to the European Commission for funding the project within a European Integrated Project of Sixth Framework Programme (Reflexive Governance in the Public Interest [REFGOV] (2005-2010).

We wish to thank also all collaborators and administrative staff of the Department of Legal Sciences of the University of Trento and the Law Department of the European University Institute.

This research could have not been developed without the participation of enterprises and institutional representatives at local level. Among others we thank:

[*for the Trentino province, Italy*]: Mr. Angheben (Ufficio Legale Associazione Industriali Trento) - Mr. Baldessari (Società Viticoltori Vallagarina) - Mr. Battistotti (Azienda Vinicola Battistotti) - Mr. Bona (Consorzio Tutela Vini del Trentino) - Avv. Borga (Avvocato in Trento) - Mr. Bort (Unione Commercio Turismo Servizi Professioni e Piccole Medie Imprese) - Mr. Bossi Fedrigotti (Cantine Bossi Fedrigotti) - Mr. Carlin (Sait) - Mr. Cesconi (Azienda Agricola Cesconi) - Mr. Coller (Confagricoltura) - Mr. Devigili (Viticoltore in Trento) - Studio Dolzani, Piccoli, Romano, Corso (Notai in Trento) - Mr. Endrici (Cantina Endrizzi - Unione Commercio Turismo Servizi Professioni e Piccole Medie Imprese) – Ms. Guido Feller (Università di Trento - Banca Esperia, Milano) - Ms. Foradori (Azienda Agricola Foradori) - Mr. Franchini (Cantina Sociale di Ala) - Mr. Gasperi (Oenologist) - Mr. Giacomini (Cavit) - Mr. Giacomoni (Cantina di La Vis e Valle di Cembra) - Mr. Giovannini (Cantina Mezzacorona) - Mr. Girardi (Proposta Vini) - Mr. Girardi (Federazione Trentina Cooperative) - Mr. Guerrieri Gonzaga (M. Guerrieri Gonzaga Tenuta S. Leonardo) - Mr. Iannielli (Società Cooperativa Agricola di Avio) - Mr. Letrari (Azienda Agricola Letrari) - Mr. Lunelli (Cantine Ferrari F.lli Lunelli) - Mr. Mastroberardino (Federvini) - Mr. Merz (Coldiretti) - Mr. Mescalchin (Istituto Agrario San Michele all'Adige) - Mr. Moser (Viticoltore in Trento) - Mr. Nicolussi (Federazione cooperative Alto Adige) - Mr. Odorizzi (Servizio Legale Federazione Cooperative Trento) - Mr. Orsi (Cavit) - Mr. Paternoster (Istituto Agrario San Michele all'Adige) - Mr. Pedrolli (Vias Import) - Mr. Pancher (Viticoltore in Trento) - Mr. Peratoner (Cantina di La Vis e Valle di Cembra) - Mr. Pilati (Cantina Rotaliana di Mezzolombardo) - Mr. Pojer (Azienda Agricola Pojer & Sandri) - Mr. Pombeni (Cantina Produttori Toblino) - Mr. Raifer (Cantina Colterenzio) - Mr. Rigotti

(Cantina Mezzacorona) - Mr. Rigotti (Assessorato Agricoltura Provincia Trento) - Mr. Rizzoli (Nosio) - Mr. Rizzoli (Cantina Mezzacorona) - Mr. Sandri (Azienda Agricola Pojer & Sandri) - Mr. Santini (Associazione Industriali Trento) - Mr. Scimone (Ethica) - Mr. Sommadossi (Viticoltore in Trento) - Mr. Spagni (Assessorato Industria Provincia Trento) - Mr. Togn (Cantina Gaierhof) - Ms. Togn (Cantina Gaierhof) - Mr. Turozzi (Cantine Ferrari F.lli Lunelli) - Mr. Zambruni (Athesia Vini) - Mr. Zanotti (Consorzio Cantine Sociali Altoatesine) - Mr. Zanuso (Cantine Ferrari F.lli Lunelli) - Mr. Zeni (Azienda Agricola Zeni - Associazione Vignaioli del Trentino) - Mr. Zublasing (Cantina San Michele Appiano).

[*for the Verona province, Italy]:* Mr. Accordini (Cantina Valpolicella Negrar) - Mr. Alberti (Dottore Commercialista in Verona) - Mr. Baldi (G. B. Bertani) – Mr. Bantini (Consorzio di Tutela dei vini Bardolino) - Mr. Bauli (Unicredit Banca) - Mr. Bennati (Azienda Agricola Bennati) - Mr. Bertomoro (Unicomm) - Mr. Boni (ConfAgricoltura Verona) - Mr. Boscaini (Masi Agricola) - Mr. Cordella (Conad) - Mr. Dal Forno (Azienda Agricola Dal Forno) - Avv. Dindo (Avvocato in Verona) - Avv. Dorio (Avvocato in Verona) - Mr. Hofer (GIV) - Mr. Fasoletti (Consorzio di Tutela dei vini della Valpolicella) - Mr. Fichera (Vinea) - Mr. Frabboni (Consorzio Cantine Sociali Verona) – Mr. Fusani (Partesa) - Mr. Fusina (Vin & Organic) - Mr. Grigolli (Oenologist) – Mr. Hofer (GIV) - Mr. Lambertini (Notaio in Verona) - Mr. Lanza (Vin & Organic) - Mr. Lechtaler (Cantina Sociale Colognola ai Colli) - Mr. Lorenzoni (Consorzio di Tutela del Vino Soave) - Mr. Magrinello (Viticoltore in Verona) - Mr. Manara (Azienda Agricola Manara) - Mr. Materossi (Azienda Agricola Gerardo Cesari) - Mr. Menini (Cantina di Castelnuovo) - Mr. Montresor (Cantine Giacomo Montresor) - Mr. Mutinelli (Gardavini – Provinco) - Mr. Nard (GIV) - Mr. Pedron (GIV) - Mr. Petrassi (Tesco) - Mr. Piacentini (Premium Wine Selection) - Mr. Posenato (Viticoltore in Verona) - Mr. Prevarin (Cantina Sociale Colli Berici) - Mr. Repetto (Agenzia Intermediazione Repetto) - Mr. Sabatini (Cantina Sociale Soave) - Mr. Sartori (Casa Vinicola Sartori - UIV) - Mr. Sitta (viticoltore in Verona) - Mr. Tamellini (Azienda Agricola La Vigna) - Mr. Tobin (Cantina Sociale Monteforte) - Avv. Tomba (Avvocato presso Banca Popolare di Verona e Novara) - Mr. Tommasi (Azienda Agricola Tommasi) - Mr. Torboli (Gardavini – Provinco) - Mr. Trentini (Cantina di Soave) - Mr. Verzè (viticoltore in Verona) - Ms. Vezzoni (Agenzia Intermediazione Vezzoni - Mr. Zadra (Zadra s.n.c.) - Mr. Zardini (Cantina Sociale San Pietro in Cariano) - Representative of Schenk Italia.

[*for the Sicilia province, Italy*]: Mr. Alessi (Azienda Agricola Terre di Giurfo) - Representative of Azienda Agricola Antichi Vinai - Mr. Biondi (Azienda Agricola Biondi) - Ms. Bonaccorsi (Azienda Agricola Bonaccorsi) - Mr. Bonajuto (Azienda Agricola Bonajuto) - Mr. Calì (Azienda Agricola Calì) - Mr. Caruso (Tenuta Bonincontro) - Mr. Cesaro (Azienda Agricola Gurrida) - Mr. Ciccazzo (Società Cooperativa Elorina) - Mr. Cosenza (Azienda Agricola Poggio di Bortolone) - Mr. Di Donato (Azienda Agricola Avide) - Mr. Di Miceli (Società Cooperativa Patria) - Mr. Ferreri (Consorzio di Tutela del Cerasuolo di Vittoria – Cooperativa Valle dell'Acate) - Mr. Foti (Oenologist - Azienda Agricola Gulfi) - Mr. Giaquinta (Coop.r.l. PIC) - Mr. Gravina (Azienda Agricola Benanti) - Mr. Grosso (Azienda Agricola Grosso) - Mr. Gurrieri (Istituto Regionale Vite e Vino – Sezione di Noto) - Mr. Lombardo (Azienda Agricola Maggio) - Mr. Mapelli (Giuseppe Meregalli) - Mr. Marletta (Azienda Agricola Nicosia) - Mr. Mazza (F.lli Mazza) - Mr. Meregalli (Giuseppe Meregalli) - Mr. Nicolasi (Azienda Agricola Barone di Villagrande) – Ms. Nicolasi (Azienda Agricola Barone di Villagrande) - Mr. Occhipinti (Azienda Agricola COS) - Mr. Ponghellini (Azienda Agricola Gulfi) - Ms. Puccia (Azienda Agricola Biscaris) - Mr. Raciti (Azienda Agricola Gambino) - Mr. Scamacca (Azienda Agricola Scamacca del Murgo) - Mr. Scilio (Azienda Agricola Scilio) - Representative of Azienda Agricola Russo - Mr. Ventura (Azienda Agricola Casa Ventura) – Ms. Vittoria (Società Cooperativa Patria)

[*for the case of Loire, France*]: Mr. Antoine (Loire Vins Domaines) - Mr. A. Barlier (Agrimer-Vinhiflor) -Ms. Biet (Sté VBBL) - Mr. Breton (Cave de Saumur) - Mr. and Ms. Buisse (Paul Buisse/ Cave de la Boule Blanche) - Mr. Cauquil (Cave du Haut-Poitou) - Ms. Chardon (Domaine de l'Aumonier) - Mr. Chatenoud (Vignerons des Terroirs de la Noelle) - Mr.Chainier (Établissements

Pierre Chainier) - Ms. Cheval (Cave de Montlouis) - Mr. Chiaroni (Alliance Loire) - Mr. Clasen (SA Bernard Massard) - Ms. Coucharrière (Monmousseau) - Mr. Desroches (Domaine Desroches) - Ms. Dozon (Domaine Dozon) - Mr. Duguet (Château de la Rafotière) - Mr. George (SA Munowen) - Mr. Jacod (Sté Ackerman Remy Panier) - Mr. Leclercq (Cave de Mont-Près-de-Chambort) - Ms. Leger (Domaine de la Girardière) - Mr. Lentz (Château des Couldraies) - Mr. Lentz (SA Munowen) - Mr. Motton (Carrefour) - Mr. Mureau (Vignerons des Coteaux Romanais) - Mr. Parmentier (Cave Coopérative du Vendomois) - Mr. Parisis (Cave des Vins de Bourgueil) - Mr- Petiteau (Petiteau) - Mr. Pillault (Pillault) - Mr. M. L. Pinat (Association Générale des Entreprises Vinicoles, AGEV) - Mr. Robineau (Cave de Sancerre) - Mr. Thierry (Cave des Producteurs de Vouvray) - Ms. Veilex (Domaine de la Chapinière). Representatives of all other institutions interviewed.

[*for the case of Hungary*]: Mr. Bock (Bock Cellars) - Ms. Garamvári (Garamvári Vineyards) - Mr. Harcz (Agricultural Markets Department, Ministry of Agriculture) - Mr. Horváth (National Council of Wine Communities) - Mr. Kamocsay (Hilltop) - Mr. Kator (Budapest Corvinus University) - Mr. Kemendy (Törley Sparkling Wine Cellars) - Ms. Király (Disznókő) - Mr. Kiss (Tokaj Merchant House) - Mr. Kocsis (Dominium Vini) – Mr. Kovács (Kovács Nimród Winery) - Ms. Majer Grebátsné (National Wine Qualification and Control Institute of Hungary) - Mr. Marcinkó (Tokaj Regional Council of Wine Communities - Tokaj Merchant House) - Mr. Mészáros (Disznókő - Tokaj Renaissance Association) - Mr. Müller (Hungarian Grape and Wine Producers Association) - Mr. Oreskó (Arany Sárfehér Cooperative and Helibor – Royal Sekt Cooperative Cellar) - Mr. Palotás (Dominium Vini) - Mr. Rábaközi (Arany Sárfehér Cooperative and Helibor - Royal Sekt Cooperative Cellar) - Mr. Sümegi (Sümegi és Fiai - Keller) - Mr. Szabó (Duplex Drink) - Ms. Szalay (Monarchia) - Mr. Varga, (Varga) - Mr. Varsányi (Varsányi Pincészet - Egri Regional Council of Wine Communities).

[*for the case of Douro, Portugal*]: Mr. Antunes (Sogrape) - Prof. Brito (Catolica University) - Mr. Candido da Silva (Portfolio Vinhos) - Mr. Carneiro Pinto (Wine o'clock) - Prof. Costa i Silva (Catolica University) - Mr. De Jesus (Amorim & Irmaos s.a.) - Mr. Duarte (Journalist) - Mr. Espirito Santo (Vinho & coisas) - Mr. Esteves (Cave Vale do Rodo) - Mr. Ferreira (Quinta do Vallado) - Mr. Lacerda (Quinta da Estrada) - Mr. Machado (AEVP) - Mr. Marquez Filipe (Symington) - Mr. Medeiro (Aliança) - Mr. Morais Lopes (Cave Santa Marta) - Mr. Moura (Vinalda s.a.) - Mr. Neves (Alinaça) - Mr. Niepoort (Nieeport vinhos) - Ms. Olazabal (Quinta do Valledomeao) - Mr. Osorio (IVDP) - Mr. Pereira (Cave Vale do Rodo) - Mr. Pires (Cave de Mesao Frio) - Prof. Rebelo (Utad) - Mr. Ribeiro Correia (IVV) - Prof. Rodrigues (Catolica University) - Mr. Ruas (Lavradores de Feitoria) - Mr. Sandeman (Sogrape) - Mr. Sandeman (AEVP) - Mr. Santos (Cave de Penajoia) - Mr. Sequeira (Grossao) - Mr. Teixeria (Cave Santa Marta) - Mr. Telles (Nieeport vinhos) - Mr. Van Zeller (Quinta Vale dona Maria).

[*for the case of Valencia, Spain*]: *representatives of the following enterprises and institutions:* Dr. José Vincente Guillem Ruiz (Consellería de Agricultura de la Generalitat Valenciana) – Mr. Javier Guillem Carrau (Letrado de las Cortes Valencianas) - Mr. R. del Rey (Fundación Observatorio Español del Mercado del Vino) - Mr. Montesinos Vicent (Anecoop) - Mrs. María Sancho (Bodega Aran Leon) – Mr. Pablo Calatayud (Bodegas Celler de Roure) – Mr. Adolfo de las Heras (Bodegas de Utiel) – Mr. Sergio Clemente (Bodegas Emilio Clemente) – Mr. Miguel Velázquez (Bodegas los Frailes) - Mr. Vicente Gandía (Bodegas Gandia) – Mr. Daniel Velda (Bodega J. Velda SLU) - Mr. Antonio Sarrión Martínez (Bodega Mustiguillo) – Mr. Juan Clemente (Bodegas Vegamar) - Mr. Carlos Valsangiacomo Gil (Cherubino) - Eduardo Mestres – Dra. Gemma Fajardo – Mrs. Ana Calvet García (Coop. Baronia de Turìs) - Mr. Luis Cervera López (Coop. El Villar) - Mr. Belda Hurtado (Coop. La Viña) – Mr. Emilio Expósito (Dominos de la Vega Viñedos y Bodegas Vegalfaro).

We apologize for any involuntarily omitted person. We are very grateful to everyone regardless of her/his inclusion in this list.

Authors bear full responsibility for mistakes and omissions.

This paper has been realised within a more comprehensive European Integrated Project of Sixth Framework Programme (Reflexive Governance in the Public Interest [REFGOV] (2005-2010).

Table of Contents

Abstract

Following the current European policy framework, this research aims to study the role of inter-firm collaboration as a tool for enhancing competitiveness and innovation in the European market.

In particular, it analyses the main models of inter-firm networks, both contractual and organisational, as emerging in the wine market in seven regions of five European countries: Loire (France), Trentino province (north-east Italy), Verona province (north-east Italy), Enna and Ragusa provinces (east Sicily, Italy), Douro and Porto regions (Portugal), Valencia (Spain), and selected regions of Hungary. The seven case studies are presented both individually and comparatively.

The observation of concrete phenomena of inter-firm collaboration allows to compare more mature markets (like the French and the Italian ones) with markets that are undergoing a major restructuring process (like in Hungary): the former being characterised by higher propensity to inter-firm collaboration and higher degree of contractual and organisational innovation than the latter in terms of identification of effective tools of networks. The different mix between territory-driven production strategies and brand-driven production strategies also influences the type of networks and their role along the supply chain in each of the examined areas.

Some common trends are considered: the higher propensity to form networks in the production phase than in distribution; the tendency to use linked bilateral contracts to coordinate the supply and distribution chain vertically, where power and value are asymmetrically distributed, while organisational networks are mostly used for horizontal cooperation among producers having similar market shares and producing complementary products or seeking for similar services supply. The increasing concentration of economic power among distributors is deeply influencing this picture, reinforcing hierarchy in vertical networks, especially in private label production, and stimulating some form of horizontal coordination as an attempt to counterbalance that concentration.

Domestic and trans-national networks are compared and the impact of wine regulation is considered on their respective emergence.

The role of European policies in promoting domestic and transnational networks is also examined. This shows the lack of coordination between rural and industrial policies, on the one side, and the definition of a menu of contractual and organisational models to be used to implement these policies, on the other side. The definition of a European legal framework on inter-firm networks could contribute to the fostering of innovation and competitiveness of European enterprises in the global market.

Keywords

Contract, Network, Inter-firm Collaboration, Supply Chain, Regulation

Introduction

Fabrizio Cafaggi and Paola Iamiceli

1. *The Economic and Regulatory Context*

In the last twenty years the European wine market has been confronted with major changes at the economic and the regulatory levels. The emergence of new producing countries has significantly increased the amount of competition, reinforcing the global dimension of the wine market. This has happened in a context where the overall drop in wine consumption is only partially compensated by commercial access to new markets in the Far East and Africa.

Between 2000 and 2006, the level of global wine exports increased by 31% in terms of volume, and 75% in terms of value, which also attests to the improvement in quality of the wine being traded[1]. The largest exporters globally are Italy, France, Australia and Spain; and, within Europe, Italy, France and Spain, followed by Germany and Portugal[2].

The dynamics of international trade evidence the good performance of Italy and, especially, Australia, which in the period 2000-2006 increased its exports by 1.4% and 2.8% respectively in terms of value (by 0.4% and 3.9% in terms of volume). However, it was France that registered the worst performance (a decline of 6.4% in terms of quantity, and 5.4% in terms of value).

The more recent dynamics from 2008 show the slowdown of growth in the export of wine worldwide[3]. Among the European countries, only Spain and, marginally, Germany increased the amount of wine exported. The United States remains the largest importer of European wine both in terms of quantity and quality[4]. Other important trends in commercial trade concern the slowdown of growth in wine exported by the New World (Australia, Chile, New Zealand and South Africa), and the increase in the bulk wine traded globally and bottled in the countries in which it is distributed[5].

The increased competition has not only put more pressure on traditional producers but they have also been confronted with new competitive dynamics: these are not particularly focused on territorial advantage, but are oriented particularly towards trademarks and brand-based development strategies.

Relationships between production and distribution, and the transformation of channels have changed in the last 10 years also due to the widespread use of online selling. The emergence of specialised distribution companies as well as the increasing role of large distribution chains in food and drinks markets reflect these changes, but also have redesigned the wine value chain requiring profound changes, in particular: a more stringent coordination between production and distribution; reallocating power and value along the chain for the benefit of those enterprises able to control access to the retail markets. This is a global phenomenon, significantly influenced by the increasing concentration of distribution enterprises in Europe and throughout the world.

The recent economic crisis has put additional pressure on competitive dynamics, favouring a reallocation of value in favour of the parts of the wine chain oriented towards medium price demand rather than niche production.

---

1 See Mariani – Pomarici, *Il mercato del vino: evoluzione e scenari*, in Albisinni (a cura di), Le regole del vino: disciplina internazionale, comunitaria, nazionale, Milano, Giuffrè, 2008, pp. 97-134.

2 See Mariani – Pomarici, above note 1, p. 114 ff.

3 See ISMEA, *Indicatori del sistema agroalimentare italiano 2008*, 2009, www.ismea.it.

4 See ISMEA, above note 3, pp. 189-190.

5 See Mariani – Pomarici, above note 1, p. 116-117 ff.

Within this scenario, the recent European reform of the Common Market Organisation of Wine has tried to enhance the competitiveness of the European wine market by searching for an adequate balance among the preservation of territorial competitive advantages, enhancement of innovation production processes, market transparency and consumer protection[6]. The European wine industry is still primarily based on denominations of origins, which are self or co-regulated regimes.

The private organizations entrusted with regulatory power concerning compliance with D.O. requirements and other safety requirements constitute large regulatory blocs which influence the formation of networks among firms belonging to the same D.O. The protection of collective reputation requires peer monitoring since when a single producer violates quality requirements it is likely that all the producers within the DO will suffer damage. Furthermore, the success of individual entrepreneurs within a D.O. may generate positive externalities on the other producers increasing both the price of wine and the value of land.

The European wine market also shows high fragmentation in terms of land ownership and the size of enterprises operating in the sector, in particular regarding grape-growers and wine producers. The average size of vineyards in Italy is 1.5 ha, in France is 8.8 ha, in Portugal is 1.2 ha, in Spain 5.9 ha and in Hungary 0.5 ha[7].

Family businesses are still the main commercial model, at least at the production level, and grapes production is often a part-time activity for land owners[8]. At the land ownership level, the European policy on grubbing-up has partially influenced this fragmentation, favouring the reduction of production potential. At least in principle the expiry of this policy in the near future might bring new changes in ownership allocation and size of enterprises.

Reducing effective capacity to access innovation processes, knowledge-based services, trademarks development strategies, and internationalisation patterns, the small size of enterprises does not help them in facing the current global competition. A move towards vertical integration can be observed at some levels, partially directed to expanding control over land, but more intensively directed to expanding control over trademarks and access to markets. These growth strategies are not easily accessible for all the enterprises (and have been pursued mostly by distributors or final producers), and are deeply influenced by the regulatory context at the national level related to land use regulation, mergers and acquisitions, and corporate groups. Some special changes have taken place in Eastern Europe, where, though within legal constraints, some limited concentration of production firms was triggered by foreign penetration, and by the transfer in the control over ex-State-owned enterprises.

A different response to entrepreneurial fragmentation can be seen in inter-firm collaboration This has not occurred so much in the area of *market-type* relations, as spot relations mostly driven by price dynamics, but more so in the area of *intensively collaborative relations*, which have mostly been driven by knowledge-based investments, the pooling of complementary strategic resources, and fiduciary ties. The path towards inter-firm collaboration is not without obstacles: these include governance issues concerning the provision of adequate incentives for cooperation in a context in which independent firms might continue to compete at some level, and to cooperate at other levels. However, the opportunity for sharing critical resources, enabling innovation processes which would otherwise be inaccessible, might represent a very important competitive advantage in the current

6 See Reg. (CE) n. 479/2008, Reg. (CE) n. 555/2008, and, recently Reg. (CE) n. 607/2009 and Reg. (CE) n. 702/2009. See now the amended text of Council Regulation (EC) No 1234/2007 of 22 October 2007 establishing a common organisation of agricultural markets and on specific provisions for certain agricultural products (Single CMO Regulation), which has recently consolidated the European regulation on wine market into this single common market regulation.

7 Source: database Eurostat (2007).

8 See Mediobanca, *Survey on the wine sector*, 2009; M. Faccio – H.P.L. Lang, 2002, *The ultimate ownership of western European corporations*, Journal of Financial Economics, 65, pp. 365-395. For Italy see Zanni – Cordelo di Montezemolo – Devigili, 2008, *Long Lasting Wineries: Managing Family Business and Succession in Tuscany Region*, paper presented at Fourth International Conference of the Academy of Wine Business Research, Siena, Italy.

scenario. This paper explores the conditions and the factors influencing these collaborative dynamics both at the domestic and the European levels.

2. The Research Questions

Following the current European policy framework (Decision n. 1639/2006/EC of the European Parliament and of the Council of 24 October 2006, establishing a competitiveness and innovation framework programme (2007 to 2013)), this research aims to study the role of inter-firm collaboration as a tool for enhancing competitiveness and innovation in the European market.

In particular, focusing on the European wine sector and concerning seven wine regions in five European countries[9], the project is aimed at:

- identifying the main models of inter-firm collaboration, both in production and distribution, then focusing on particularly intensive forms of collaboration as characterised by high interdependence among participants' activity (*inter-firm networks*);
- examining, comparatively across the regions, their legal forms and functions, considering in particular the differences between traditional producer countries (France, Italy and, with different traditions and evolutionary dynamics, Portugal and Spain) and producer countries that, also due to major political and institutional changes, are currently involved in a complex process to rebuild the industry and to redesign the market (Hungary);
- considering the extent to which different models of production (particularly those linked to grape-growers' cooperatives, and those linked with integrated final producers) may influence the formation of networks and the conditions in which these different types of producers may be induced to compete, collaborate or create mixed networks;
- analysing the factors that influence positively or negatively the formation of networks, and explain the choice of particular legal forms (contracts, corporations, cooperative companies, economic groupings etc.), functions (e.g., networks more focused on production or distribution, or *vice versa*), and extension (networks which are mainly local, national or transnational);
- in particular, with regards to explaining factors, examining whether these choices are influenced by:
    - the size, the legal form and the ownership of the firm (e.g. whether it is a family business or a cooperative company);
    - the structure of the economic chain, as also influenced by the level of concentration or fragmentation of enterprises operating at any given stage of the chain;
    - the nature of the product and its price (having regards to different price ranges or different typologies of wine, e.g. Champagne or port) and the nature of the production process (being especially influenced by the seasonal cycle);
    - the regulatory framework in which enterprises operate, having special regards to:
        - land use/property regulation;
        - process regulation
        - product regulation
    - and, within this context, to:
        - the impact of the CMO-wine reform (Council Regulation (EC) No 479/2008 – then consolidated into the EC Regulation n. 1234/2007 -, Commission Regulation

9 Seven Case Studies have been conducted in the following regions or local areas: Loire (France), Trentino province (north-east Italy), Verona province (north-east Italy), Enna and Ragusa provinces (east Sicily, Italy), Douro and Porto regions (Portugal), Valencia (Spain), and selected regions of Hungary.

(EC) No 702/2009) with special reference to the completion of the grubbing-up system; the support measures in the area of European wine promotion in third countries; the harmonisation of the food and drinks regulation concerning the use of denominations of origin and geographical indications, and labelling (of d.o./g.i. and non-d.o./g.i. wines); the role of producers and inter-branch organisations as collective goods suppliers and, possibly, networks incubators;

    - the impact of safety and quality control regulatory mechanisms (including self-regulation) on the chain structure and on the formation of networks;
    - the impact of the law and/or codes of practices concerning the relationship between producers and distributors;
    - the role of regulation and self-regulation to set up collaboration models, both at the national and international level.

- analysing the possible role of inter-firm networks as instruments for governing the supply and distribution chains, at the national and international level, also having regard to their impact on the modes of power and value allocation along the chain and, more generally, on the competitiveness of European enterprises in the global market;
- examining the possible role of inter-firm networks in responding to critical failures emerging in the wine market, with particular reference to: the fragmentation of ownership of land and firms; the fragmentation of the availability of bulk and bottled wine; the (in)adequacy of service supply, as specific to the wine industry; and the obstacles to innovation, production and knowledge transfer;
- analysing the role of networks for the internationalisation of the wine industry having special regard to the modes of coordination of the availability of European wine in the global market;
- deriving some policy implications in terms of regulation or self-regulation of inter-firm networks, having special regards to the identification of areas in which the role of networks could be promoted, and to the possible definition of general guidelines for governing inter-firm collaboration.

3. *Methodology of the Research; Caveats*

This is an interdisciplinary research project which combines theoretical and empirical methods. Legal and economic analyses are jointly deployed to examine the emergence of inter-firm networks and to identify possible means for reducing the obstacle to inter-firm collaboration

The empirical research has been gathered by conducting seven case studies in five European countries: France (Loire); Hungary; Italy (Trentino, Verona province, east Sicily); Portugal (Douro); and Spain (Valencia). The case studies are not necessarily representative of the structure of the industry in their countries. The inferences from the comparative analysis should not be applied to a country-based comparative analysis. They provide interesting insights on some features of the shape and functions of networks as inter-firm collaborative devices. Given the diversity of the production systems in the five countries, they present more idiosyncratic characteristics in the upper part of the chain, and more "representative" features of the general country structure when moving downstream in the supply chain. We want to emphasise in the comparative framework the importance of the Hungarian study, which has helped to describe the features of a newly-designed market for an old and consolidated industry.

In each region, in-depth interviews have been conducted with enterprises, commercial organisations, public and private institutions operating in the sector, professionals, and other experts. Up to 30-35 enterprises per case study (with a minimum of 17) have been interviewed through semi-structured interviews, and a long closed-question questionnaire[10]. A simplified version of the questionnaire has been used in Hungary.

The use of the questionnaires has allowed the collection of qualitative information on several organisational aspects of inter-firm collaboration and its governance. While this permits a more easily comparable overview, this methodology has not been directed at all to the construction of statistics, or any other econometrical survey. The selection of the enterprises does not represent any kind of significant statistical sample. On the contrary, we have selected those enterprises which, after a first round of investigation, were likely to belong to one or more networks. The aim of the research was not to show the ratio between networks and other forms of organization of the supply chain, but to analyse the places in which networks could be found, and the reasons why they have taken a particular form. We wanted to identify whether networks could provide an effective model of inter-firm collaboration both at domestic and transnational levels and if a network-based policy could be combined with the regulatory framework defined by the new CMO.

The research has been designed with the contribution of enterprises and professional associations. The research questions have been defined and refined in the light of input coming from different stakeholders. The direct involvement of these stakeholders has been considered as one of the most important sources of the research design throughout the different stages of the project, from the definition of the research questions to the collection of information, to the verification of the research hypotheses. Focus groups and workshops have been organised in the last part of the project in order to discuss preliminary findings and results, with one taking place in Brussels, and a few in each country.

Tab. A – Number of interviewed enterprises according to the function carried out

	Italy			Loire	Douro	Valencia	Hungary*	***Tot. N. interviewed enterprises***
	Trento	Verona	Catania - Ragusa					
N. grape-growers	5	5	2	3	1	1	2	**19**
N. final producers	24	21	28	22	23	15	16	**149**
N. distributors	5	4	3	5	6	1	1	**25**
Tot. N. interviewed enterprises	**34**	**30**	**33**	**30**	**30**	**17**	**19**	**193**

**= 10 enterprises were interviewed with a reduced version of the questionnaire, while the other ones were interviewed using a grid of open questions*

[10] The "long closed-questions questionnaire" includes 184 multi-response questions, organised into seven sections (*I: Enterprise, property structure and organization; II: Financing sources and bank relations; III: Types of internationalization and choices concerning the law applicable; IV: The enterprise and the production and distribution cycle of goods and services; V. Production of services for the firm; VI: Networks for production and management of knowledge; regulatory networks. particularly, networks for the protection of the denomination of origin; VII: Networks for the production of public local goods*). Section IV includes 4 sub-sections on production and distribution networks due to be proposed in different combination to the interviewed enterprises, depending on its position along the chain and its participation into networks.

4. A Brief Conceptual Glossary: from Inter-firm Collaboration to Networks

Not all forms of inter-firm collaboration can be defined as "strategic" relations. Furthermore, not all strategic relations amount to networks.

In the perspective of this research, by "**strategic relations**" we mean legally identifiable relations (which are generally contractual), characterised by a high level of stability measured in terms of duration (a conventional threshold of three years has been adopted), together with a concurrent element showing the critical value of the relation for the enterprises' activity, including the hard replaceability of one or all the parties, the use of co-determination practices as regards the technical and economic elements of the transactions (e.g. wine making methods), and the exclusive feature of the relation, as excluding concurrent relations with other partners for the same type of transaction.

The **network** represents a more complex collaborative pattern. By "network" we mean a collaborative structure, governed through a multilateral contract, a set of bilateral linked contracts and/or a new entity (a corporation, association, foundation, etc.) in which two or more enterprises participate without being incorporated into it. Within a network participants pursue a common goal and intend to conduct one or more projects of common interest, sharing strategic objectives, critical resources (tangible and intangible), and coordinating their own activity in order to collaborate in the pursuit of those objectives.

If compared to other forms of inter-firm collaboration carried out through standardised contracts (e.g. the sale of a standardised service), the network form implies a higher interdependence among the parties, as driven by the pooling of complementary resources (including non-material resources, e.g. know-how) - a high level of specific investments which cannot be redeployed easily in alternative relations.

Looking at the **function and the activity** performed within the network, we distinguish between *production* and *distribution networks*.

With regards to the **structure**, we distinguish between *contractual* and *organisational networks*, including in the former networks governed through a multilateral contract (e.g. a strategic agreement among several producers to create a new type of wine) or a set of bilateral contracts (e.g. contracts between a final producer and several grape-growers for the production of grapes as based on some specific method); and in the latter, networks as a new separate entity (a corporation, cooperative company, association, etc.).

On the basis of territorial extension of the network's activity and its possible link with one or more geographical areas, we distinguish among *local, national* and *transnational networks*.

Chapter I
Inter-firm Networks in the French Wine Industry: The Case of the Loire Valley

by Sandrine Clavel[11]

1. *Introduction - General Data*

> « Pour être plus compétitif, il faut inciter financièrement et fiscalement les entreprises à moderniser les outils et à regrouper les structures de vinification.[…] En effet, pour affronter la très rude concurrence sur les marchés, il faut des entreprises de taille suffisante, ou alors des PME regroupées, ainsi renforcées » (Report of the French Comité Economique et Social, 2008, I-12).

This study concerning *inter-firm networks in the French wine industry* focuses on the wine industry in the *Loire Valley*. The choice of the Loire Valley has been motivated by several considerations, some of them purely practical. Among the substantial reasons for this choice, however, it should be mentioned that, as evidenced hereunder, this area is characterized by the small size of the enterprises operating in the wine sector. Our idea was that, consequently, the emergence of networks of firms was likely to occur. The findings of this study are based on two tools: questionnaires proposed to thirty enterprises operating both in the production and in the distribution sector; and open interviews of enterprises and of "institutional" public or private bodies. Consequently, the networks described might be networks in which the enterprises submitted to the questionnaire were participating, or networks the existence of which was merely reported by one of the enterprises or institutional bodies interviewed. Finally, one should bear in mind that the findings of this study might not always be representative of the structure of French wine industry in general.

General data. While it was the largest wine producer in the world until 2006, France is currently the second largest wine producing country worldwide, by volume, with a total production of 41.4 million hl in 2008[12]. The Loire Valley is the 3rd largest national producer, with a total production of 3 million hl in 2007[13]. It dedicates around 59,100 ha to the growing of grapes, while the total surface area of vineyards in France is 823,799 ha. The general trend, both at the national and local level, is a reduction of the surface used as vineyards; this trend being stronger in the Loire Valley than it is at the national level (over the last ten years, a reduction of 3.4% at the national level, and a reduction of 9.9% in the Loire Valley). This situation should be considered in light of the French consumption of wine, which still places the country in the first place for consumption[14]. France has progressively increased its importation[15].

As compared to production nationally, the Loire Valley production is characterised by a higher percentage of D.O. grape production (81.9 % of the surface and 81 % of the production of the Loire Valley, against 58 % nationally). More remarkably, while the proportion of D.O. wine production has been decreasing at the national level over the last decade (by 1.9%), it has been increasing in the Loire Valley (by 3.4%; and up to 22.5% since 1980). This evolution is crucial when considering and analysing the Loire Valley wine industry.

---

[11] University of Versailles, France - Faculty of Law and Political Science [sandrine.clavel@uvsq.fr].

[12] Source : OIV Forecast 2008. The national production was 40,315 million hl in 2007 (Source Viniflhor Stats 2008), 2007 being the year of reference for the present study.

[13] Source for all following data, referring to the year 2007, except if otherwise mentioned: Viniflhor Stats 2008 (DGDDI). Please see the annexed tables (Annex I, II and III).

[14] 31.8 million hl in 2008, OIV Forecast 2008.

[15] 5.7 million hl in 2008, OIV Forecast 2008.

The other important feature of the Loire Valley wine industry, as compared to that nationally, is its relatively low export level. In 2005, while France exported 30 % of its national production[16], the Loire Valley exports were only 17.6% of the total production in 2005[17]. This is one of the reasons why the focus has been placed, over the few last years, on the importance of developing exportation. The export markets for Loire Valley wines are more or less the same as that of other French wines: United Kingdom (37%), Belgium (22%), Netherlands (8%), Germany (8%), US (9%), Canada (2%), and Japan (2%)[18].

When it comes to **the property structure**, the Loire Valley presents a highly fragmented picture. 17,900 grape growers[19] share 59,100 ha of land dedicated to the vineyard. The average surface area of individual properties is small (3.3 ha). However, it should be noted that an important amount of grape growers in the Loire are exploiting a small surface for self-consumption purposes[20]. Hence the number of professional grape growers does not exceed 7.000 and the "normal" size of land for professional exploitation is nearer to 10 ha. These exploitations are largely of a familial nature, organised either in individual firms ("entreprise individuelle", with no legal personality), or small companies (civil or commercial with limited liability). Around 23 cooperative companies are currently operating in grape and wine production activities, comprising less than 2000 members[21]. These numbers are quite low, if one considers that the small size of properties should provide incentives for grape growers to participate in cooperatives. However, the average size of cooperative members' properties is not as small, around 4.5 ha[22]. One reason why the number of cooperatives and cooperative members is limited is that the Loire Valley is not a region where the cooperative system has been traditionally well developed, as compared to the system in which grape growers sell their grapes or wine to wine merchants ("Négoce", around 100 firms).

These characteristics undoubtedly influence **the structure of the production chain**. Two main models of production have been found.

The first one is integrated, with one single firm[23] undertaking the whole production process, from grape growing to labelling. 34% of the Loire Valley wine is produced according to this model[24].

The second one could be pictured as intermediate, with a division of the production process between two main enterprises: on one hand, the grape grower undertaking the growing of grapes, the transformation into juices and eventually the vinification; and on the other, a wine production structure whose activities eventually start from *pressage* to bottling and commercialisation. These production

16 Source : *Customs administration*, 2005. For 2008, this proportion has reached 33% (OIV Forecast 2008). Please note that France is now only the 3rd country for the exportation of wine (in volume), whereas it remains the largest export country in value.

17 Source : *Customs administration*, 2005.

18 Source : *Customs administration*, 2005.

19 Number of declarations for grapes collecting in 2007 (Viniflhor Stats, 2008).

20 In 2004, Viniflhor indicated that 25,000 producers shared 5000 ha for self consumption purposes, while 8000 producers exploited 65.000 ha for commercialisation purposes. We do not have updated data on this proportion.

21 24 cooperatives in 2006 with 1,961 members (Source Viniflhor/CCVF/DGDDI 2007; see Annex III); our study revealed that as least one of these cooperatives has ceased its activity.

22 Ibidem

23 Even demanding functions might be legally dispatched among several different companies owned by the same individual. For instance, individual producers sometimes run two companies or structures: a civil one for the grape production, because of the French regulation imposing the civil nature of agricultural activities; and a commercial one for the wine production. The reason for this is that a civil structure with an agricultural object is bound by strict rules are regards its commercial activities, which are allowed only if they are accessory to the agricultural activity.

24 Source : Bonetti (2008), *Salon des vins de Loire*

structures can be wine merchants (53% of the production[25]), or cooperative companies (13% of the production[26]).

It should be noted that many grape growers in the Loire Valley operate in both forms: part of the production is individually turned into wine labelled under the name of the property; and part of the production is sold to wine production structures, usually wine merchants. Moreover, part of the cooperatives' production is not sold under the name of the cooperative, but sold as bulk wine to wine merchants. In such case, the production process involves three main actors: grape-growers, growing grapes and picking it, cooperatives, turning grapes into bulk wine, and wine merchants, assembling the wine, bottling it and eventually labelling it.

The general evolution seems to favour the integrated model. The individual grape growers participating in the study emphasised that the prices paid by wine merchants and cooperatives were too low, with this situation encouraging them to produce wine directly. This evolution is apparently confirmed by the "professionalization" of the wine growing activity in the Loire Valley. The "amateur" production, undertaken on very small pieces of land by individuals for whom grape growing is only a secondary activity, has been decreasing (a reduction of 41% of this type of grape grower in the Loire Valley over the last ten years).

As regards **the structure of the distribution chain**, one key feature is the important proportion of direct sales to consumers: 27% of the Loire Valley production is sold through this distribution process, this ratio being notably high as regards that nationally (3.8%). The important number of small individual integrated firms (undertaking the whole production process from grape growing to labelling) is certainly the main reason for this feature: these producers put small volumes of wine on the market, and direct sale offers sufficient outlets for such volumes, while allowing better margins. The rest of the production is distributed either via a single distributor (large scale distribution – herein after LSD -, hotels-restaurants-catering – hereinafter Ho.Re.Ca. or simply Ho.Re.Ca., other retailers), or via intermediaries such as agents, importers, central purchasers[27].

2. Regulatory Structure

In France, the wine industry is highly regulated. Regulation is present at almost every step of the process, from the regulation of land to the regulation of the promotion of wines (see table below). Many public as well as private bodies intervene in the definition and the implementation of such regulation, under the general supervision of a public body –FranceAgriMer (formally Viniflhor)-.

---

[25] Ibidem

[26] Ibidem

[27] The precise proportion of each distribution channel has not been found for only the Loire Valley. It is available at national level but cannot be transposed to the Loire Valley case, because of the unusual percentage of direct sales.

Table 1 – Regulatory structure

What is regulated ?	Who regulates ?	How is regulation made ?
Structure of the vineyards (surface, planting rights, variety)	**Viniflhor / FranceAgriMer** (Pub) **SAFER** (P/P)	-administrates the French planting rights -administrates the grubbing-up -Dispatches the subsidies for restructuration and conversion -Administrates agricultural properties (preemption rights)
Market control (Regulation of the offer, Control of exchanges)	**Viniflhor/ FranceAgriMer (**Pub). **Interbranch organisations** (P/P)	-until 2008 (ended Reg. 479/2008), administrates storage contracts -administrates support measures in favor of distillation -Control the volumes exchanged (only DO) through compulsory registration of sale contracts -Define and control the payment conditions -Eventually regulate the offer (until 2008) through decisions of storage
Promotion	**Viniflhor/ FranceAGriMer** **Interbranch organizations** (P/P) **Syndicats de défense des producteurs**	-Finance promotion projects in France and abroad
Research and Innovation	**Viniflhor/ FranceAgriMer** **Interbranch organizations** **Public research Institutes *(INRA, ITVV)***	-Order and finance research programs -Implement public or semi public research programs

What is regulated ?	Who regulates ?	How is regulation made ?
Denomination of Origin Regulation (AOC)	**DGCCRF (Public)**	-Controls and sanctions frauds
	INAO (Pub)	-Recognizes the DO -Recognizes the ODG (and withdraws the agreement) -Agreement (and withdrawal) of certification bodies
	ODG (Organisme de défense et de gestion : private body (association) submitted to a public agreement (INAO)	-Proposes the recog. of a DO -Selects the certification body -Controls the producers (internal audit) -Delivers recommendations to comply in case of breach
	« Organisme certificateur » : publ. or priv. body chosen by ODG and agreed by INAO	-Delivers a « Certification » of wine (due to compliance to conditions) -Controls the producers (external audit) -Applies sanctions (withdrawal of certification) in case of breach
	-**Syndicats/Association de défense des producteurs** (Private ; 1 per DO)	-Constitutes the ODG -Supplies advice and eventually services to producers -Defends the producers and lands vis-à-vis third parties
Geographical Indication Regulation (vins de pays)	**Viniflhor / FranceAgriMer** **DGCCRF** **DGDDI**	-Delivers the agreements -Administrates the *filière:* recognition of OPA, quality controls
	OPA(Organismes professionnels agréés) / **Syndicats de défense des producteurs** (Private)	-Recognized by FranceAgriMer; control the quality of products
	Confédération française des vins de pays (Private)	-Interbranch organization for the defense of producers vis-à-vis third parties.
Production process	-**Interbranch organisation** (P/P)	-Eventually sets quality and packaging rules (DO)
	-**INAO / ODG** (see above)	-Set and control the production process when related to DO
	-**Self Regulation by producers** For instance Confédération des Vignerons indépendants	-Impose certain standards allowing using the correlated distinction (ex.: CVI).

What is regulated ?	Who regulates ?	How is regulation made ?
Products / Quality	**INAO** **INAO / Interbranch organisations / ODG** **DGCCRF**	-Delivers quality Labels (ex.:bio). -Control the quality of DO products (see above) -Controls the quality / consumers safety
Label / Intellectual property rights	**INPI** (Public) **DGCCRF** **DGDDI**	-Registers and administrates labels and patents -controls labeling -search and sanction infringements of IP rights
Customs	**DGDDI**	-Controls the movements of wine in and outside of the country -Implements the rules on customs (accises)
Environmental sustainability	**-INAO** **-Self Regulation : Terravitis** (Private)	-Delivers Label AB (not to wine?) -imposes standards allowing to use the label

Presenting all the public or semi-public rules applying in the wine sector is not feasible in this chapter. However, the importance of the denomination of origin (DO) production in the Loire Valley Region justifies a short presentation of the DO regulation; such a presentation is all the more necessary that recent reforms in the DO regulation, characterized by a "transfer" of the implementation of regulation from public bodies to private or semi-private entities, might foster cooperation between wine producers.

Up until the 1st of July 2008, the DO regulation system was mainly implemented by a public body, the INAO (*Institut national des Appellations d'Origine*), which was in charge both of recognizing new DO, and of delivering a yearly agreement for producers to commercialize DO wine, upon quality tests realized on random samples of the production. This system was heavy, and not always efficient.

A reform entered into force on the 1st of July 2008. The INAO mission is now redefined. On the one hand, INAO is in charge of recognizing new DO and of specifying the technical standards of each DO. On the other, it is in charge of delivering *ex ante* habilitations for producers to produce DO products, according to criteria such as the geographical location of the property, the production structure, and the age of the vineyard… Once a habilitation to produce a DO wine is delivered, the whole *control of the production process* is decentralized towards private entities set up and financed by producers. This control relies on the preexisting *associations for the defense of producers* (see *below*). These associations have been invited to constitute *ODG* (*Organismes de Défense et de Gestion*), which are private associations submitted to the agreement of INAO. There is one ODG per DO; the ODG is in charge of selecting a *certification body* among several private or public entities having obtained the agreement of INAO to such aim. The control process is then divided between the ODG and the independent certification body. The ODG realize "internal audits" to verify that the producers authorized to commercialize DO wine are compliant to the standards set out by the INAO. If a breach is observed, the ODG can deliver recommendations to comply, but cannot apply any sanction. The certification bodies realize "external audit" on a regular basis. If a breach is observed, the certification body must inform INAO, which can apply sanctions, including a withdrawal of the habilitation.

3. Main Characteristics of Contractual Relationships in Production and Distribution

3.1. Production

In production, contractual relations are almost exclusively national, which should not be surprising in the region where DO wine represents 81% of the production.

The most striking characteristic of contractual relationships between grape growers and final producers in the Loire Valley is undoubtedly the regulatory intervention of INTERLOIRE, the inter-branch organisation of grape growers and wine merchants for the Loire Valley. Most transactions concerning DO wines should be formalised into standard written sale contracts provided by INTERLOIRE. These contracts must be registered. They are, however, not well detailed (price, volume, delivery conditions). Most contractual relationships are legally structured on the sole basis of these annual sales contracts, with only a few long term framework contracts being entered into.

However, this does not prevent the relationships from being long term in practice, as it appears that wine merchants normally deal with the same grape growers over the years. The results of the case study reveal that, when considering only relations identified as purely market type (10 cases, excluding cooperatives for production), it is usual that almost 100% of the sale contract relations are stable ones.

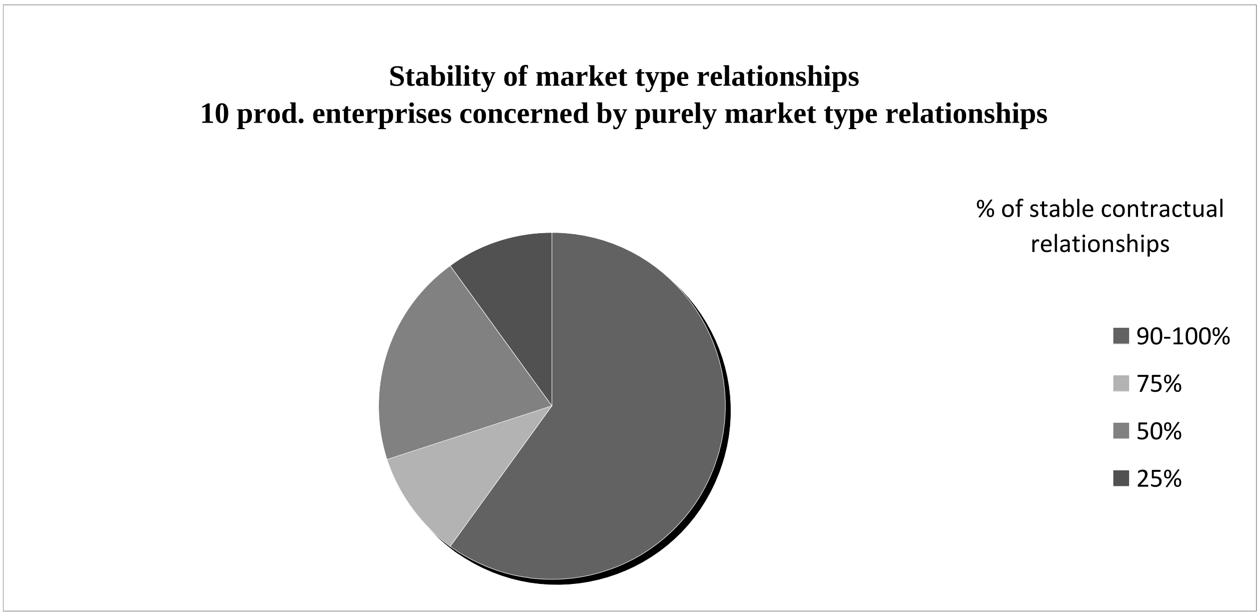


Figure 1

The nature of the relationships varies, but there is usually a certain degree of cooperation between grape growers and wine merchants. Many of the latter use the services of mediators (“courtiers de champagne”) in order to communicate their expectations to the former; in this case the cooperation is indirect, or “unilateral” (the grape growers try to match the demand of wine merchants), instead of mutual. Yet more direct and mutual cooperation may arise, when wine merchants and grape growers agree on the type of products to be provided by the latter. Roughly, it appears that the more qualitative or specific the expected product, the more direct cooperation there is.

The same conclusion may be reached as regards allocation of power: the more qualitative or specific the product, the more balanced the relationship between grape growers and wine merchants, whereas a deal concerning less qualitative products will result in more power for the buyer (wine merchant). It is also when these specific products are concerned that we can find long term framework contracts, according to which parties mutually agree to bind themselves to buy/sell to each other certain quantities for several years and/or organise the general basis of their relationship.

Finally, legal exclusivity is rare and even inexistent between grape growers and wine merchants; it can exceptionally be organised for special products, but even then it is seldom legally formalised.

3.2. Distribution

In distribution, the contractual relationships are normally based on "spot" sale contacts. Multi-annual framework contracts are extremely rare, but that does not mean that the relationships are not long term in practice. Actually, it seems that distribution contractual relationships are normally stable, in relations to both retailers/Ho.Re.Ca., and large scale distribution (LSD). When it comes to LSD, however, the contractual relationships tend to be tenser, because of LSD exercising strong pressure on final producers. As for the legal forms, distribution contracts are almost always in writing. However they are poorly detailed when the distribution is undertaken by retailers or Ho.Re.Ca.: the contract is often no more than the purchase order. LSD imposes standard forms of contracts, more detailed and sometimes very detailed when they include a schedule of conditions. Distribution contracts usually organise a territorial exclusivity for the distributor, and eventually exclusivity on certain products (LSD). International distribution contracts do not substantially differ from national ones.

4. The Emergence of Networks

It arises from the above description of contractual relations that even relationships that should be analysed as purely market-type include a certain level of cooperation, though not formalised: when parties are in fact involved in a long term relationship, indirectly cooperating and implicitly working on a quasi-exclusive basis, they become less substitutable. Networks appear when these collaborations get more formalised and organised. Considering the different types of networks, both contractual and organisational, that have been evidenced in production and distribution (1), this section will focus on the reasons why such networks emerge (2) and the factors influencing, positively or negatively, their emergence in the Loire Valley (3).

4.1. The types of networks

The case study has permitted to evidence several forms of networks, both for production (1) and distribution (2) purposes, as well as a few inter-phase networks (3).

4.1.1. Networks for production purposes

In production, the networks identified are relatively numerous. The study has revealed that in the Loire Region, most of the enterprises that were interviewed were members of one or more networks for production purposes. Among 24 enterprises operating in the production area, only 4 did not participate in any form of network (see *figure 2 below* for details). However, these findings should be considered in the light of a more detailed analysis.

While *not-for-profit or mutual networks* are prominent (almost 80%), the number of *for-profit networks* is less important. The rather correct proportion of participation in for-profit *organizational* networks is to be taken with caution, as 8 of the 24 enterprises which have been interviewed were actually participating in the same organizational network (a second-tier network composed of interviewed cooperative companies). Not-for-profit networks and mutual networks are always constituted in an organizational form, usually *associations* for not-for-profit networks, and *cooperatives* for mutual networks. For-profit-networks may be organizational –normally a company or an Interest Economic Grouping (IEG)- or *contractual*, but a slight advantage to the former is visible.

However, if it is obvious that ***not-for-profit and mutual organizational networks*** are the most traditional forms of cooperation between producers, ***for-profit networks, both organizational and contractual,*** seem to be emerging progressively; at the same time, traditional not-for-profit organizational networks are evolving to endorse new missions.

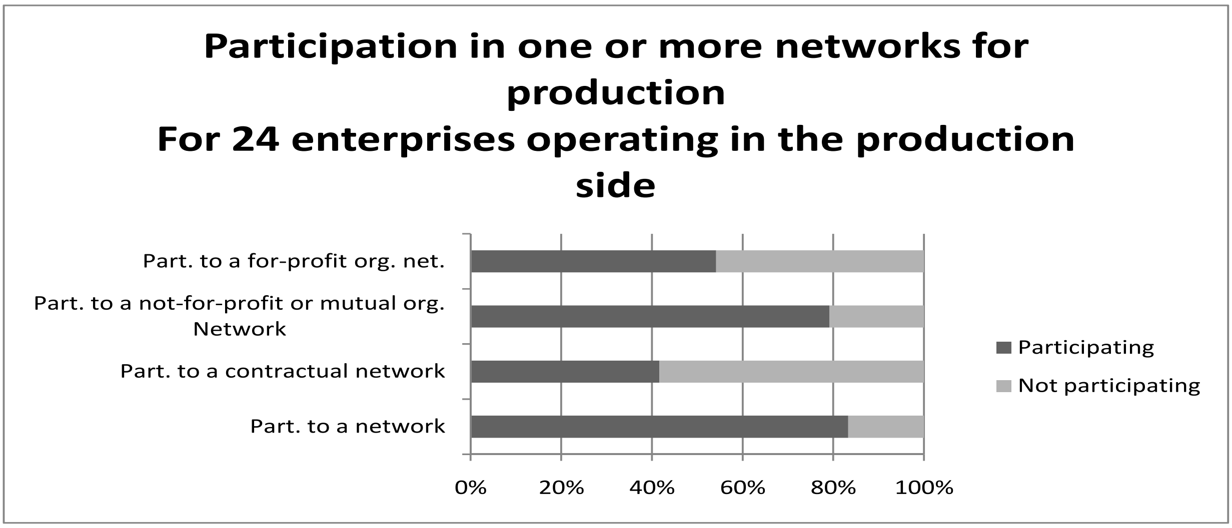


Figure 2

4.1.1.1. Not-for-profit organizational networks

Not-for-profit organizational networks are those the purpose of which is not *directly meant* to increase the profits of their members, neither by fostering the earnings nor by lowering the costs. Still, the objectives of these key figures of the French wine production sector, usually constituted in the form of an *association* (French "Association Loi 1901"), are not uniform. Some of them are nevertheless meant to promote the collective interests of their members (i), whereas others are mainly designed for the defense of the general interest or of the public good (ii).

(i) Not for profit organizational networks for the defense of the collective interests of their members

A sub-distinction should be made between on the one hand, organizations assuming a public "regulatory" function, and on the other those being purely "private" bodies" instituting self-regulation on a voluntary basis.

1- <u>"Regulatory" bodies: Professional Associations / Inter-professional Organization</u>

Almost all of the actors of the production chain in the Loire Region are members of these Professional Associations, because as it has been mentioned earlier, the Loire Region produces a very high volume of DO wine, and these associations are nowadays vested with important missions as regards DO production. The relevant distinction here is between grape growers (being final producers or not) and wine merchants (buyers of grapes or wine for the commercialization of wine).

➢ *Grape growers* are usually members of *organizations for the defense of producers*. The legal form of these organizations is either the French "*Association*" (L. 1st July 1901), or the French "*Syndicat professionnel*" (L. 21 March 1884). These forms imply a not-for-profit purpose, and freedom of internal governance.

The role of these organizations has progressively evolved. Formally created for the defense of the producers in a given geographical area, they are now mainly meant to protect the vineyard when it is *covered by a denomination of origin*. The recent reform concerning the control of DO (see *above* 2) has vested the associations for the defense of producers (or more precisely the *ODG* created by these associations) with new regulatory functions; these associations are in charge of constituting the ODG (*Organisme de défense et de gestion*), a private association submitted to the agreement of INAO, the missions of which are to propose the recognition of a DO, to select a certification body, to control the producers (internal audit) and to deliver recommendations in case of breach. Still, apart from their new missions of control of the DO production, associations for the defense of producers carry on their traditional missions in favor of grape growers, such as protecting the interests of their members against other actors of the wine industry (mainly wine merchants; see *infra* on Inter-professional Org.) and against external stakeholders (such as public actors, private persons, for example when they carry on projects threatening the vineyards...). They also usually assume *advising functions* in favor of their members, on technical (climate, products, new techniques…) or juridical matters, as well as *promotional missions* in favor of the DO.

The fact that all the grape growers interviewed were producers of DO wine certainly explains the very high ratio of members of such organizations evidenced by the case study (86% of individual producers and 70% of cooperatives for production). Decision not to participate into these associations was possible for DO wine or grapes producers, up until now, because membership was not mandatory (it was not either, and still is not, for grape growers and wine producers producing not DO wine). However, 50% out of the 12 enterprises answering the question on the reasons for participation considered that membership was compulsory, which was legally not the case at that time. It is the 2008 reform of the DO control system that has made membership compulsory for grape growers producing DO wine. Almost 17% considered that participating was a mean to have access to technical information they would not be able to obtain otherwise. For 17%, the choice to participate was motivated by the influence of the organization on the strategies on quality, quantity and price setting. Only one of the enterprises considered that being a member could increase its reputation. Among the other reasons for participating, the organization was pictured as a "club" where producers could develop networking, and only one producer had the feeling that he could, by participating, have an influence on the way the DO would evolve. Only 6 enterprises answered the question on what would be the economic impact for their business in case they would decide to leave the organization. A large majority considered that this would have no impact at all. At the same level, the one enterprise not participating in these organizations, though producing DO wine, considered that participation was of no impact on its activity but would be, at worse, a cause of rigidity.

Associations for the defense of a DO, quite numerous, have created *Federations* (networks of networks) on a geographical basis (for instance "Fédération Viticole de l'Anjou", grouping all associations for the defense of DO in the Anjou sub-region). These federations exercise the same missions as their members, but they are usually more involved in the representation of the interests of the producers at the regional and national level. They are, for instance, the ones in charge of negotiating at the inter-professional level (see *infra*). The different federations of DO protection organizations participate in the *Confédération des Vignerons de Val de Loire* (CVVL), a federation of federations (see *figure 3* below).

➢ *Wine merchants* also have their professional organization. At the regional level, they are represented by one single body, known as EGVL (*Entreprise des Grands Vins de Loires*), a regional syndical chamber. It represents and defends the interests of wine merchants, notably by negotiating with the representatives of grape growers, but also by assuming promotional missions in favor of the wines produced in the Loire Valley Region.

➢ Professional associations of grape growers and individual producers on the one hand, and the professional organization of wine merchants on the other, exchange in the context of a *regional inter-*

branch organization: INTERLOIRE. INTERLOIRE is a private association (Loi 1901) vested with a public agreement. It is composed by 60 representatives equally representing wine merchants (30 representatives designated by EGVL) and grape growers/individual producers (30 representatives designated by the associations for the defense of producers reunited into one big federation).

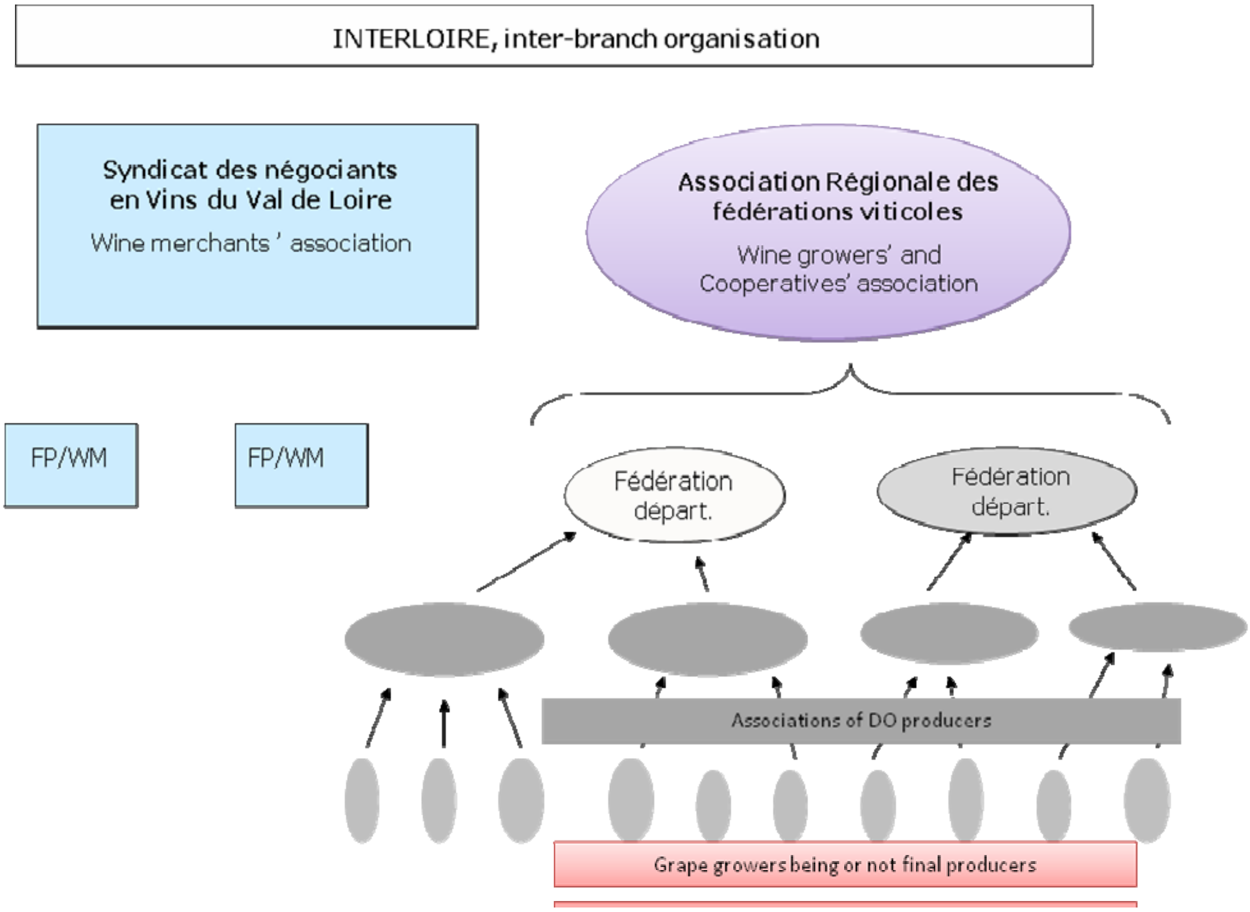


Figure 3

The missions endorsed by INTERLOIRE are diverse. INTERLOIRE is principally in charge of *monitoring the relationships between wine merchants and grape growers*. It is the entity where both sides exchange on a yearly basis in order to negotiate and define the price margins. It offers a conciliation structure in case of litigation between a wine merchant and a grape grower. More largely, INTERLOIRE *supervises the DO market* in the Region; it controls the volumes of DO products exchanged thanks to a system of compulsory registration of sale contracts. To this aim, INTERLOIRE supplies the producers with contracts forms. Up until 2008, INTERLOIRE also had a direct function of regulation of the market, as it could decide the storage of DO products. INTERLOIRE has also an important *mission as regards DO products*. It finances promotional actions for the Loire Valley DO wines in France and abroad, as well as research programs meant to improve and develop the products. INTERLOIRE is financed by its members: a subscription is due on each hectoliter of DO grapes, juices or wine exchanged between wine merchants and grape growers; this subscription is equally supported, for each transaction, by the wine merchant and the grape grower. The compulsory registration of sale contracts mechanism mentioned above allows INTERLOIRE to calculate the contribution owed by each member.

2- Private bodies: Associations of producers

Some producers participate in collective not-for-profit organizations on a purely voluntary basis (not linked to the production of DO wine). These organizations can be classified in two categories: organizations for the delivery of a quality label, and organizations providing services.

➢ The main *private organization for the delivery of a label* evidenced by the case study is SVI (*Syndicat des Vignerons indépendants*). The purpose of this association of individual wine producers is to increase the quality of the wine and to communicate towards consumers in order to promote the products of the members. The members are presented as "craftsmen", each of them growing its own grapes for making its own wine according to recognized techniques. The organization defines a "*Charter*", i.e. standards that members must respect in order to be allowed to use the quality label "SVI"[28]. The reasons for participating are of course of a commercial nature (enhancing the value of the products through the quality label), but also social or technical. Members worship the human network and the profit deriving from technical advices delivered by the organization through newsletters, and also thematic training days. The monitoring system set up by the association is rather simple. There are no controls made on a systematic basis. Even if the association is operating at the national level, it is organized in small local groups or antennas. In such a small "club", everyone is aware of the practices of the others. In case of a suspicion of breach, controls are undertaken, and can lead to recommendations or even sanctions such as the exclusion of the member in breach.

➢ The case study has also permitted to identify several *private organizations meant to provide services to their members*, in particular GDDV and APIV 41. These are associations constituted at the local level (department), generally on the initiative of the local antenna of the *Agricultural Chamber*, financed both by members, by the Chamber and by public funds (subsidies). GDDV (*Groupement départemental de développement viticole*), for instance, is an association the purpose of which is to assist individual wine producers in developing their activities, in France and abroad. To this aim, GDDV contributes to the prospection of new clients abroad. It also allows individual producers to pool their forces for exportation purposes, for instance by organizing some sort of "logistics platform" meant to reduce the exportation costs.

(ii) Not-for-profit organizational networks for the defense of the public good

Certain not-for-profit organizations, participated by producers, are dedicated to the defense of a general or public interest. This is particularly the case for *the protection of the environment* and *the promotion of sustainable development*.

Several enterprises in the case study were members of such an organization: TERRA VITIS. TERRA VITIS is a national *association* of producers (L. 1st July 1901) working at the promotion of sustainable development. Members agree to develop and follow given standards of production (according to a strict "schedule of conditions" referring notably to techniques and products (fertilizers) used in the grape growing activity, to the disposal of waste, to security at work for employees…) meant to preserve environment and human health. To this aim, they commit to regularly follow different sorts of trainings and to accept controls on their properties. The counterpart is that they are allowed to use a private label testifying of their commitment.

[28] The principals being that the grape grower must personally exploit its vineyard with due respect to environment, personally take care of picking the grapes, personally turn its own grapes into wine, bottle the wine on the property, stay informed of the latest technical development though respecting tradition, offer personal services and information to the consumers who have access to the property.

Among the interviewed producers, the evaluation of the interest of participating in this organization was mitigated. Many producers considered that the constraints were too important as regard the enhancement of the value of the products resulting from the use of the label.

4.1.1.2. Mutual organisational networks

Several types of organizations in the wine sector can be pictured as "mutual", in the sense that they are "operating in the interest of members and distributing no or limited profits". They are initiated by producers for the service of their individual interests. These organizations are not-for-profit ones in the sense that they are not intended to generate profits for themselves. But they are aimed at increasing the profits generated by the activities of their members, most generally by allowing economies of scale, hence reducing the costs for producers. Their traditional legal form is the cooperative one. The case study has permitted to evidence two rather different features of such cooperatives. On the one hand, *cooperatives for the production of wine* are entities participated by grape growers not willing to produce their own wine. On the other, several types of *cooperatives for services* are entities organized by producers who, although willing to individually produce their own wine, intend to lower their production costs by putting in common some activities.

(i) Cooperatives for the production of wine

The cooperative system is quite a popular form of production of wine in France, although the Loire Valley is not the region were such system is the most developed. Notwithstanding the existence of a large number of small sized properties, traditionally favouring the cooperative organizations, 23 cooperatives in the Loire Valley produce only 13% of the wine (as mentioned above). The general trend both at national and regional levels is neatly in favour of a concentration and of a professionalization of the cooperative sector. It becomes more and more difficult for very small grape producers to become members of a cooperative, as, both for quality reasons and for the purpose of efficiency of the management, cooperatives are reluctant to accept members providing too small quantities of grapes.

- Missions

The cooperatives in the Loire Valley Region are constituted between several grape growers usually supplying the cooperative with their *grapes*. They undertake the wine making process. Most of the time, part of the wine is then bottled and commercialized under the labels or brands of the coop, while the rest of it is sold as bulk wine on the wine market (this giving rise to interesting experiences of networking between cooperatives, see below 4.1.1.3*i* the case of *Ackerman Remy Panier*). It is not common for cooperatives in the Region to collect *bulk wine* (see *figure 4* below) from their members. Collecting grapes allows better monitoring on the quality of the wine. And it reveals that for members, the coop is mainly a system meant to reduce the production costs. Only two cooperatives, among the 10 that have been interviewed, also collected grapes or bulk wine from non members, on the basis of contractual relationships (see *figure 5* below).

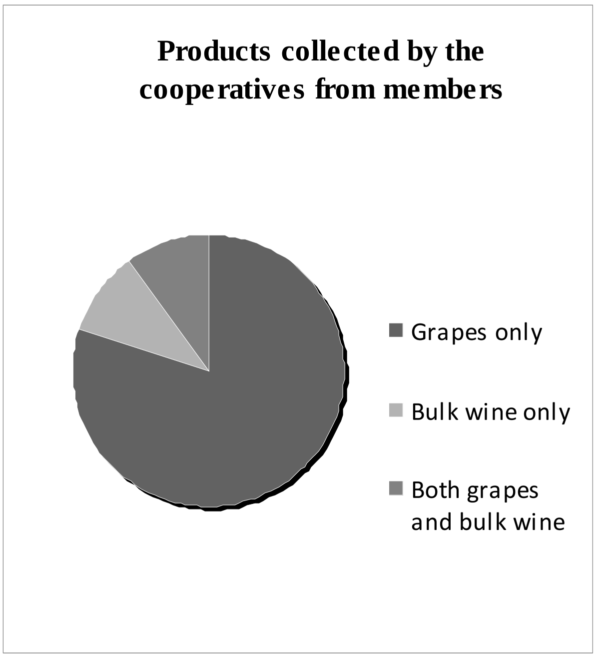


Figure 4

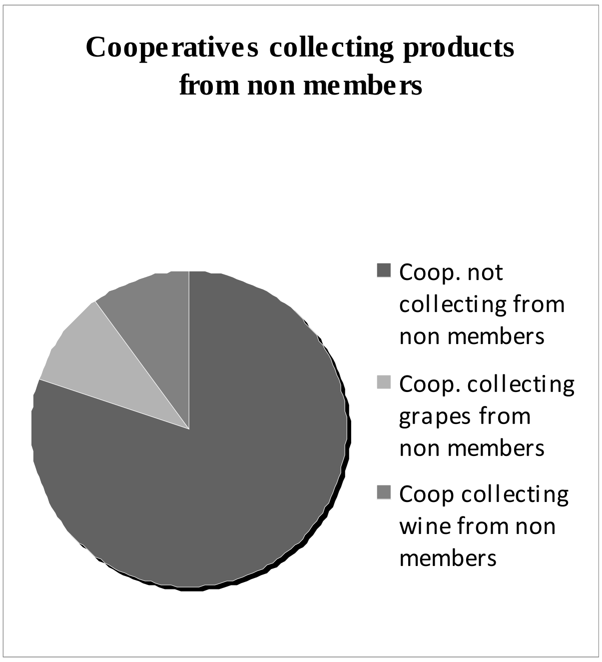


Figure 5

It is not common, either, for cooperatives to provide "wine making services", in the sense that grape growers can use the production tool to produce a specific wine under their own names or brands (this is to be distinguished from the situation where one or several grape growers enter into a special project with the coop. See *herein under*). However, two cooperatives mentioned that part of their activity was dedicated to the supply of services for the production of wine on behalf of their members: the production tool is used in order to produce wine bottled under the labels of some members, and commercialized by the latter. The missions of the cooperatives systematically go further than the production of wine. All of them provide, in various proportions, services to their members. These services may be of a technical nature (advice and information); in that case the supply of services is a mean to control the quality of the grapes. But services are also meant to help the grape growers running their exploitation, when they concern juridical, accounting or financial assistance. The services are provided to members for free, except for financial services. No cooperative reported "selling" services to non members. However, one mentioned the possibility for grape growers to become members through "*services shares*": without any commitment from each party to provide/collect grapes, some grape growers can become members by buying shares allowing them only to benefit from certain services offered by the cooperative (for example, bottling). These shares do not have the same voting powers as "regular shares".

- Organization

Cooperatives for the production of wine are organized according to the French regulation applying to agricultural cooperatives, which presents some specific features as regards other cooperatives companies. The regime, originally set out by a law enacted in1947, is nowadays defined by the French Rural Code (art. L. 521-1 *et s.*). A statute has been adopted in 2006[29] in order to adapt the regime of these agricultural companies to the main evolutions of company law. The common organizational features of the cooperatives in the Loire Valley Region, as evidenced in the case study, are the following.

1. *Membership*. The number of members is variable, from 25 to 300. All members are not necessarily grape growers supplying grapes to the cooperative. Very often, former suppliers remain members when they stop their grape growing activity, simply because their shares have not been transmitted to anyone. Owners of the land, when it is rented to a grape grower supplying the coop with grapes, are also members of the coop if the statutes of the coop impose such membership. The length of the commitment is also variable, but usually quite long, around 25 years. Access is normally always possible for new members, but the cooperatives are statutorily allowed to define technical standards conditioning membership: schedule of conditions, minimum production... The participation of each member in the capital (number of shares) is normally defined according to the size of the land engaged in the production of grapes on behalf of the cooperative (grape growers are not necessarily compelled to engage their entire vineyard), and/or the annual volume of production and/or the quality of the grapes.

2. *Voting rights*. The decisions are normally taken on a majority vote of the members present or represented. The principle one man/one vote is not mandatory in French agricultural cooperatives. Pursuant to art. L. 524-4 of the Rural Code, cooperatives can define the weight of each member in the decision making process according to two criteria: the quantities of grapes brought and/or the quality of the grapes brought. The cooperatives for the production of wine which have been interviewed often used this possibility, but some of them still functioned on the basis of one man/one vote.

[29] Ordonnance n° 2006-1225, 5th Oct. 2006.

3. *Exclusivity and non competition*. There again, the practices are very diverse. Whereas some cooperatives adopt a strict exclusivity principle, with members bringing 100% of their products to the coop., some others impose absolutely no exclusivity to their members. However, the most common feature seems to favour a partial exclusivity: members are not committed to engage their entire properties, but only a proportion of these which can be statutorily defined or individually negotiated; exclusivity is applying only on the portion of the property that has been engaged. Non competition clauses are defined according to exclusivity provisions.

4. *Financial conditions*. A distinction must be made between remuneration for the capital and remuneration for the grapes. Agricultural cooperatives are allowed to serve remuneration for the capital. However, most of the cooperatives interviewed did not. The remuneration for the grapes is defined according to the results of the cooperative. Payment is usually either made once the results of the exercise are known, or fractioned in time –which allows, in the absence of remuneration for the capital, to share the benefits between members in the form of a complement of the price paid for the grapes. The price paid to each member, according to the results of the cooperative, obviously vary according to the quantities brought by each member, but also, in some cooperatives, according to the quality of the grapes or wine brought.

5. *Exit*. The term of the engagement is normally mandatory; no exit is possible until the end of the engagement period. However, agricultural cooperatives are allowed to decide on a majority vote the exclusion of a member. Exclusion is feasible when members cease to respect the access requirements or important decisions taken by the board (a restructuration plan for instance); it is possible but usually not applied for other breaches such as breaches of exclusivity or non competition clauses.

(ii) Cooperatives for services

Two different main figures have been found.

- CUMA (*Coopérative d'utilisation de matériel agricole*)

These are agricultural cooperative companies for services (*cooperatives de services*). Several producers create a cooperative company the function of which is to buy and own agricultural equipment, and eventually to employ skilled workers for the use of such equipment, in order to put the equipment/workers at the disposal of its members. For their functioning, CUMA follow the general rules applying to agricultural cooperative companies (art. L. 521-1 *et s.* Rur. Code; art. R. 521-1 *et s.* Rur. Code).

Most producers interviewed in the case study owned shares in CUMA. However, some of them consider that the economies induced by this type of cooperative mechanism cannot always overcome the disadvantages. One major inconvenient is linked to the nature of the viticulture activity. It is often difficult or impossible to anticipate precisely the moment when specific equipment will be needed. For instance, the moment when the grape picking will start cannot be decided in advance, as it depends on how mature the grapes are and on how the climate changes. The risk then is that several members need the picking machine at the same time. This is why some producers prefer to own personally some strategic production equipment, and reserve the intermediation of CUMA for specific ones. Still, CUMA are very interesting instruments. One convincing example encountered in the course of the research is the CUMA BEL, created among a hundred of wine producers (Bourgueil and St Nicolas de Bourgueil Regions) in order to organize the transport and treatment of waste from several enterprises producing wine. A purification station was constructed by the CUMA, with the support of public funds. This is an interesting illustration of how these mutual organizations can, at the same time, serve the private interests of their members by allowing them to fulfill their legal obligations at a lower cost, and the general interest.

- "*Coopératives d'approvisionnement*" (cooperatives for the supply of goods)

Also built according to the legal form of agricultural cooperative companies, these are very popular forms of mutual networks. Several producers create a cooperative company in charge of buying, for the benefit of all its members, one or several of the elements used in the production of wine, such as fertilizers, bottles, corks… The grouping of the purchase allows the cooperative company to obtain better prices than those its members would have individually obtained, with smaller orders. The cooperative than re-sales these elements to its members. The price paid is, this way, lower than the one they should have paid on the market. This system allows the producers to benefit from economies of scale.

4.1.1.3 For-profit networks

These are the newest forms of collaboration between producers. Two types of such networks have been identified, <u>with an influence on their legal structure</u>. Firstly, for-profit collaboration in the production area can occur "horizontally", between the same kind of operators (all grapes growers, all individual producers, and all cooperatives). In such case, the legal structure is usually an organizational one. Secondly, for-profit collaboration can be undertaken "vertically", between different kinds of operators, usually a wine producer and one or several grape-growers. In such case, the legal structure of the network is preferably a contractual one.

(i) Organizational (and mixed) forms of for-profit networks

Organizational forms of for-profit networks have been identified at almost all levels of the production chain, but only on a "horizontal basis", *ie* between operators of the same nature.

1. Between *grape growers*, firstly, the existence of a *network for the purpose of grapes' production*, constituted in the form of a civil company[30] (French SCEA, "*Société civile d'exploitation* agricole"), has been reported. The French SCEA is normally a legal structure used by only one grape grower[31] to run a single exploitation; in that case it is not a network. However a case has been found where several producers, each of them growing several types of agricultural products, did put in common, under the structure of a SCEA, the small parts of their properties dedicated to grape growing in order to exploit them jointly. Instead of individually taking care of their very small vineyards, at great expenses in time, money and efforts, the grape-growers share their investments and efforts in order to produce bigger amounts of grapes, thanks to a governance structure were votes and earnings are divided according to the size of the land brought by each grape-grower to the Company. One particularly interesting feature of this experience is that the SCEA does not produce its own wine, but collaborates for wine production purposes with another network. The grapes are collected by a cooperative of which the company was a member. In such case, the civil company is used as a networking device between grape growers for the grape growing activity, and cooperates with another network for the purpose of wine production (the cooperative).

[30] It should be mentioned that the civil nature of the company is imposed by the French regulation, according to which agricultural activities are always of a civil nature.

[31] Actually a minimum of two members is legally required, but this condition is easily fulfilled if a family member becomes a partner of the company.

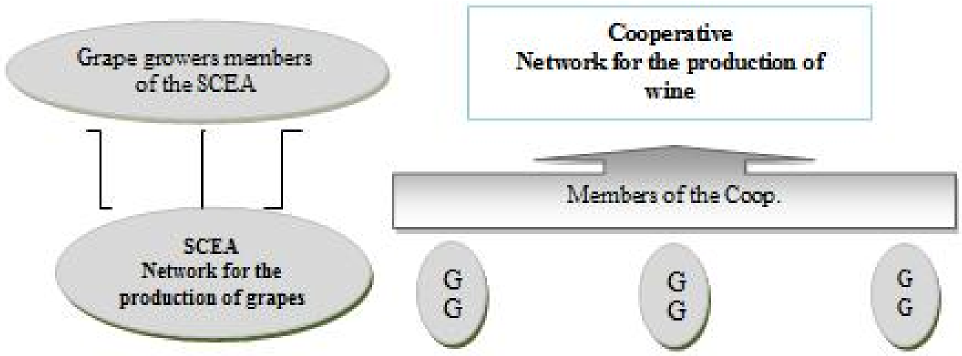


Figure 6

2. Between *individual producers*, secondly, several organisational *networks for the production of wine* have been identified, with two different legal structures. One structure is the French *GIE* (*Groupement d'intérêt économique* or Interest Economic Grouping). Several cases have been found where two or more individual producers decided to create such an IEG in order to assemble and turn part of their individual production into a specific wine, different from the ones they individually commercialized. The IEG offers the advantage of being a rather flexible structure, with very few mandatory legal rules and a lot of space for members' autonomy. However, in the cases evidenced, the provisions of the status of the IEG were very poor and the organisation rather simple, based on the unanimity rule. Some producers prefer to collaborate through a commercial entity, usually a commercial company with limited liability (French *SARL –Société à responsabilité limitée*). One interesting experience has been evidenced, where four producers created such a company in order to assemble, bottle and commercialise part of their individual productions. Although this structure is much more organised than the networks for production in the form of an IEG, the statutes of the company are still poorly detailed. The unanimity rule has been favoured, each producer implicitly undertaking the missions most compatible with its competence and experience. Trust between the members is given for the reason for such light legal organisation.

   The motivations for choosing an IEG or a commercial company are not clear. It seems that for the members, the legal differences between the two forms of structures are not obvious. The general feeling seems to be that an IEG is a better device to start collaboration, to "make a test", while the commercial company is more demanding but offers more opportunities to develop the commercial activity of the network.

3. Between *cooperatives*, thirdly, one big ***mixed network*** involving almost all of the cooperatives in the Loire Region has been evidenced. This network has several branches and notably a distribution one (see description below). The part of the network for the production of wine involves a commercial company is the form of a not-listed French *Société anonyme*. 97% of the shares of the company are owned by a holding company, constituted between 7 cooperatives, each of them participating according to its importance (with a 1% participation from a bank). The cooperatives turn the grapes collected from their members into wine. This wine is then partly bottled and commercialised under the brands of the cooperatives. But an important part of it is commercialised as bulk wine on the wine market. However, the prices offered by the wine merchants being too low, the cooperatives created their "own" structure. Part of their bulk wine is sold to the common company, which owns several brands of wine. The common company also buys wine to individual producers, and even abroad (as the wine produced by the company is not DO wine), bottles it and commercialise it under its brands.

Through the holding company, the cooperatives have a direct influence on the commercial policies of the common company. The common company has the functions of a third-tier cooperative, but with a commercial form.

4. Finally, it should be mentioned that the case study has not permitted to find any horizontal network between wine merchants or between wine merchants and cooperatives, except for one, an IEG between a cooperative and a wine merchant. The experience has failed and the existence of the network has been so short in time that it has not been included in the study.

(ii) Contractual (and mixed) forms of for-profit networks

- The empirical study has not evidenced any network based on ***a multilateral contract***.

- But at least one network based on ***a set of coordinated bilateral contracts*** has been found. This network is constituted between a *wine merchant, and several grape growers*. The objective is, for the wine merchant, to secure the production of one of its wines, a specifically qualitative one (sparkling wine), by insuring a stable quality and quantity of the products provided for by the grape growers. The network feature is characterised by several elements, the most important being:

  1) The existence of pluri-annual framework contracts between the buyer and the sellers, instead of "spot" sale contracts;
  2) The detailed level of obligations, through a schedule of conditions;
  3) The coordination of the activity by the wine merchant, providing information to grape growers and exercising control over their activity;
  4) The absence of exit possibility, except in case of breach of the contracts;
  5) The existence of an implicit exclusivity.

- An equivalent feature has also been met in the relationships between *cooperatives and some of their members*. For the production of specific items (organic wines for instance), the cooperative creates a system, parallel to the mutual one, where a contractual collaboration with some of its members is organised. The cooperative is in charge of coordinating the activities of the members involved in the specific project, through the drafting of a schedule of conditions (in collaboration with the grape growers) and the monitoring of the production of grapes. The members involved receive a special price for their contribution, usually higher than the price normally paid to "regular" cooperatives' members. As compared to the figure where the contractual network is driven by a wine merchant, the one involving cooperatives seems to lie on a more balanced relation between the wine producer and the grape growers. Grape growers are more directly involved in the definition of the conditions of participation, and in the design of the products. The reason for this is certainly to be found in the ***mixed nature of the network***. Though part to a contractual relationship with the cooperative, the grape growers are also members of this cooperative. The governance of the cooperative implies that members be directly involved in the decisions taken.

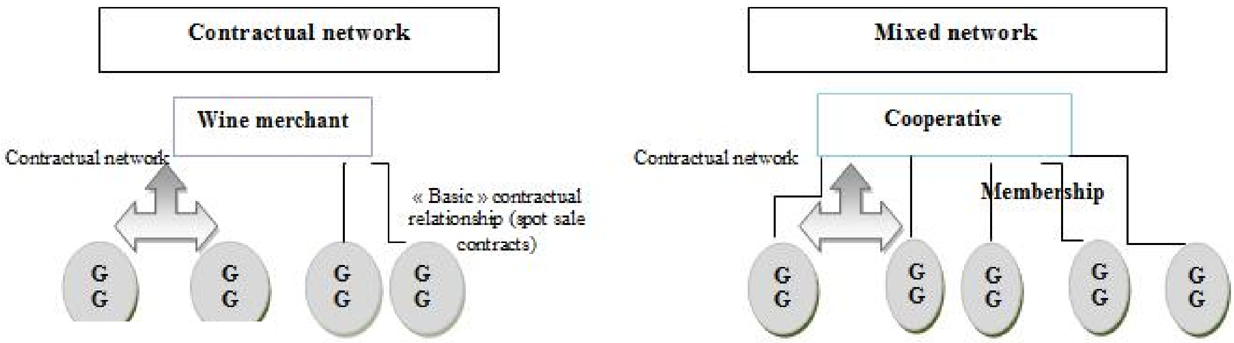


Figure 7

4.1.2. Networks for distribution purposes

Several networks for distribution purposes have been evidenced in the case study; they are all *for-profit structures*. All of these networks are "horizontally organized" on the initiative of wine producers, whereas distribution enterprises are seldom participating. As in production, the *organizational form* is favored, but one *mixed network* based on reciprocal contractual agreements has been identified.

4.1.2.1. Organizational networks

Between *individual producers*, several "horizontal networks" constituted for distribution purposes have been identified. The legal forms are of two sorts, as it was the case in production: IEG or limited liability commercial company (*SARL*). However, the precise object of the network varies. In one case, the purpose of the network, originally created in the form of an IEG between several wine producers commercializing different types of wines, was to foster the distribution of the products of its members in France and abroad. The reason for networking was in this hypothesis double: in terms of commercial bargaining power, networking allowed the producers to formulate a more attractive offer by widening the portfolio of the products proposed to the buyers; in terms of logistics, cooperating allowed members to reduce their exportation costs. An interesting evolution of such network is worth mentioning. While initially constituted in the form of an IEG, the network has been finally turned into a *SARL*; the motivation for changing the legal form was to include new members running purely financial activities (whereas the members of an IEG are necessarily grapes or wine producers, as the IEG's activity has to be the accessory of the activities of its members) for the purpose of collecting funds. In another different case, an IEG has been constituted between several wine producers in order to facilitate their relationships with a large scale distribution company. Originally, these producers were selling their wine to a wine merchant, in charge of dealing with the LSD Company. Due to litigation with the wine merchant, the producers decided to directly sell their products to the LSD Co. But the latter wanted to be able to collect big volumes of wine without having to deal with several producers. This is how the wine producers finally decided to create an IEG among them, in order to be able to propose the LSD Co. one single commercial partner providing important amounts of wine.

Other interesting experiences concern *collaboration between cooperatives* for distribution purposes. The case of the holding company, composed of seven members as cooperatives for the production of wine operating in the Loire Valley, has been presented above as regards production networks. The same holding company owns not only a production company, but also (with 99% of the shares) a distribution company constituted in the form of a French not-listed *société anonyme*. The distribution company undertakes two missions. It is firstly in charge of distributing, through all types of distribution canals, the wine bottled under the names and/or brands of the cooperatives being members of holding company. In that case, the interest of the network is to allow a specialisation in distribution activities, and to widen the portfolio of the products proposed to the clients. A similar network (in the form of a French *SARL*) has been evidenced between agricultural cooperatives producing totally different types of products (not only wine, but also honey, apples...). The distribution company is, secondly, in charge of collecting bulk wine from its members, in order to sell bigger volumes of wine to LSD Co.

4.1.2.2 Mixed network

One mixed network for distribution purposes has been evidenced in the case study. This network is organised on the basis of reciprocal contractual distribution agreements between parent companies, according to a specialization principle. In this situation, a French company (wine merchant) and its Luxembourg parent company (wine merchant), independantly functioning despite their organizational links, agreed to distribute each other products in each other geographical sphere of influence. While the Luxembourg company would distribute the products of the French Co. in Luxembourg, Belgium and Germany, the French Company would distribute the products of the Lux. Co in France and in the United States.

4.1.3. Inter-phase networks

Inter-phase networks are the less common figures. They imply collaboration between grape growers, wine makers and distribution companies and/or final consumers. Only two types of such networks have been met.

The principal inter-phase network evidenced in the case study is a contractual one, undertaken for the production of a specific type of wine (organic wine). A contract is entered into by a LSD company and a wine merchant for the sale by the latter to the former of organic wine. In order to match the expectations of the LSD Co., defined in a schedule of conditions, the wine merchant enters several long term contracts with grape growers for the delivery of grapes grown according to the specifications defined by the LSD Company.

A very original form of network involving wine producers is the AMAP system, a direct partnership between producers and consumers organised on a solidarity basis. The system, developed for the distribution of fresh vegetables and fruits, including table grapes (but not wine at the moment), is meant to allow producers to reducing intermediary distribution costs (direct sale from producer to consumer thanks to the intermediation of a not-for-profit association) and to allow consumers to have direct information on the producer's activity. One cooperative producing wine, but also other agricultural products including table grapes, did participate into such a network.

4.2. The role of networks

The above description of the networks evidenced by the case study has permitted to underline that *not-for-profit organizational networks* are the most traditional form of cooperation in the wine production sector. But *for-profit networks, organizational or contractual***,** seem to be emerging progressively; at the same time, traditional not-for-profit organizational networks are evolving to endorse new missions.

What are the reasons for such emergence and such change?

In distribution, our study has revealed networks, the *creation of which was driven by final producers*. This observation should be kept in mind when analysing the findings of the case study. It should be noted, however, that LSD has been difficult to include in the panel[32]. From the producers' side, cooperation for distribution purposes is only a recent concern. This certainly reveals, as the detailed

[32] Only one LSD firm agreed to answer a "limited" questionnaire.

analysis will evidence, that networking in distribution is, for producers, a mean of responding to economic changes induced by the internationalisation of markets and the power of distribution. If the for-profit organisational form prevails, confirming that the creation of distribution networks is driven by economic reasons, the growing importance of "solidarity based structures" should not be underestimated.

The roles of these different types of networks, and the motivations for their creation, are of course different, but some common reasons can be identified. The networks that have been found seem to respond, broadly, to four concerns.

4.2.1. Efficiency of management

This is certainly one of the most traditional reasons for networking, both in production and distribution.

The cooperative system provides a significant illustration of how networking may be a management device <u>in the production chain</u>. The cooperative system is, historically, a *reply to the fragmentation of land*: owners of small pieces of land, individually producing small amounts of grapes, cannot afford to undertake the whole process of wine production. This is why, though individually growing their grapes, they "delegate" the production process to a common structure, the cooperative. However, it has been mentioned above that the cooperatives, facing competitiveness challenges, tend to professionalize. One of the consequences of this trend is that they are less willing to accept very small amounts of grapes from tiny, "non professional" grape growers. Collecting such small amounts, in a context where the concentration of the cooperative sector leads to geographical distance between the coop and its members, is too expensive. And it is more delicate to monitor the quality of the grapes when the coop has too many members. As a result, some small grape growers might have difficulties finding a cooperative accepting them as members[33]. This is why one experience evidenced by the case study, where the solution to properties fragmentation had even been found *at an earlier stage of the production chain*, *for the exploitation of the land* rather than for the production of wine, is particularly interesting. As described hereinabove, several producers, running "multi-agricultural activities" exploitations, decided to jointly exploit, under the structure of a *SCEA* ("*Société civile d'exploitation agricole*"), the small parts of their properties dedicated to grape growing. Such mechanism allows them not only to divide the costs of exploiting the vineyard, but also to collectively produce bigger amounts of grapes which are then collected by a cooperative.

Networks are also *a means of reducing production and distribution costs*. By externalizing service supply to a common structure created for the mutual interests of its members, they allow the sharing of expensive equipments (ex.: CUMA), provide economies of scale (ex.: "*coopératives d'approvisionnement*", logistics net.) or commercial and technical information to members (GDDV, SVI, but also cooperatives for production.). With this aim, "mutual" (coop) or non-profit (association) organisational network are favoured for obvious reasons: services are provided at the lowest cost, because the structure is not meant to make profits. However, the study has found some weaknesses in the system. The case of CUMA is relevant. The reduction of costs for grape growers as members of CUMA is of course apparent, as they share the weight of the investment required for the acquisition of the equipment, and are authorised to use this equipment more or less as their own. However, some grape growers are critical: in a seasonal activity such as grape growing, time is crucial. If grapes are to be picked on a given day, the grape grower cannot afford to wait until the picking machine is available. This is why some grape growers prefer, for strategic equipment, to enter market type relations; either by direct investment; or, if externalisation is needed, by using the services of private

[33] The problem is increased by the circumstance that, due to insolvency or concentration, the number of cooperatives is dramatically reducing. When a coop goes out of business, its members have to find a new organization accepting them as members.

service providers. Even if the service is more expensive than it is in a CUMA, the impact in terms of managing efficiency is higher.

Networks may also be *a mean to secure access to specific products*. In production, a wine merchant will for instance conclude coordinated long term contracts with grape growers, allowing the buyer to influence the quality of the products (through information, training and control of the activity of grape growers) and to secure the quantities delivered (through obligation to deliver/ exclusivity clauses). The case study has also found that such an aim may be pursued at the distributor's initiative, though favouring the creation of an inter phase network: to answer the demand of the distributor for a specific product (organic wine) submitted to a strict schedule of conditions, a wine merchant enters a long term contractual agreement with one or more grape growers, imposing on them the conditions defined by the distributor. The long term agreement is, for the grape grower, the counterpart of the investment made to adapt the production to the quality expected, and for the wine merchant the mean to monitor the grape growing activity.

4.2.2. Response to the evolution of commercialisation and distribution

According to the case study, the growing power of distribution, notably under the influence of LSD, often leads to abuses of economic dependence[34]. Networking is one of the responses to this offered by producers, as it allows them to *increase their commercial strength*. It is striking that in distribution, almost no real case of cooperation between producers and LSD has been detected. The behaviour of LSD is certainly too opportunistic[35]. Networking is then more for strengthening the production side in order to imbalance the negotiating power of both parties, than to foster cooperation between distribution and production. From this perspective, one key objective for producers is to be able *to provide high volumes of wine* to distributors, so as to become less easily substitutable (ex.: Company or IEG for the production of wine constituted between several final producers who put their production, or part of their production, in common in order to offer large volumes or a wider panel of products to LSD). This approach is totally coherent with the nature of the wine production of the *Loire Valley*, where products are usually easily substitutable in the view of LSD (as compared to some brands of *Champagne* or *Bordeaux* for instance); only volumes can keep LSD distributors captive. This is true to the extent that even cooperatives, which already produce higher volumes than individual producers, have organised in such a manner: the case of ALLIANCE LOIRE exemplifies a situation where several cooperatives put part of their production in common to be able to offer, through a common for-profit organisational network (a commercial company), large volumes to LSD (for private labelling purposes). This observation leads to a relevant issue. The case study has not shown any cooperation between wine merchants, or between wine merchants and cooperatives, intended to strengthen the commercial power of wine merchants as regards LDS or even as regards grape growers[36]. Several explanations may be proposed, keeping in mind that it is still possible that such cooperation exists but has not been found because of the limited panel included in the case study. Firstly, it is possible that such cooperation does not exist because wine merchants are, or consider themselves, individually strong enough in their negotiation with LSD (this would be, according to the panel's answers, the real explanation); Secondly, it is possible that such cooperation does not exist because it does not fit the way wine merchants conceive of their own activity. Yet it is questionable

---

[34] This is so to the extent that France as enacted a law with the purpose of monitoring the relationships between distributors and suppliers (Loi "Chatel" n°2008-3 du 3 janvier 2008). The law is too recent for its effects to be measured.

[35] The only LSD representative in the panel insisted on its concern for keeping the relations with producers "market type". One "network type" cooperation between a wine merchant and a LSD Co. demonstrates the risks created by such cooperation for wine makers, as the wine merchant, once its know how has been transmitted, has finally being evicted.

[36] Aside from the existence of EGVL, the federation of the Loire Valley wine merchants, which represents them in the inter-branch organisation INTERLOIRE.

whether this situation is totally coherent with the evolution of the market, especially considering that there is no sensible process of concentration of wine merchants firms[37].

From the individual producers' perspective, the networking system is, in a sense, a substitute for the wine merchant system, whose objectives are similar: to collect, in order to put on the market, larger amounts of wine than those individually produced. It is not surprising, then, that individual producers tend to consider networking as a favourable substitute for the intermediation of wine merchants: a common structure allows the collection of bigger volumes and to keep control over the production; the suppression of an intermediary allows better margins (one case showed an IEG specifically created by individual producers to "skip" the intermediation of a wine merchant in their relationship with LSD). Networks led by wine merchants could be an answer, if it is considered that the evolution mentioned above induces two types of changes in the wine merchants' activities. First, wine merchants tend to be more "wine makers" (with a specific know-how giving an added value to their intermediation) than mere "wine sellers". Such transformation should foster the emergence of vertical networks between wine merchants and grape growers, so as to allow the former to influence positively the quality of the products and to secure their supplies. Second, wine merchants should be able to provide larger volumes than private networks of individual producers. This should foster cooperation between wine merchants, or between wine merchants and cooperatives.

4.2.3. Response to the evolution of consumption

"Responsible consumption" under the influence of environmental and social policies, and "selective consumption" under the influence of health policies, have changed wine consumers' behaviour. Consumers buy smaller quantities, but they want quality, and perhaps above all information. The concern of wine producers as regards such evolution is also a clear reason for networking, with three key concepts: promotion and information; proximity; and innovation.

Many networks in production undertake a *promotion and information function* on behalf of their members. This is notably the case for not-for-profit organisational networks, such as associations of producers, professional associations or inter-branch organisations. Participation in such networks authorizes producers, upon their respect of strict conditions, to use the D.O. mention (professional associations), or other quality labels (SVI, TERRAVITIS) deemed to be attractive for consumers.

Proximity concerns, maybe surprisingly, can also encourage networking. For instance, direct sale to consumers can be undertaken by groups of producers. Such cooperation reduces costs for producers, and allows consumers to directly access a wider range of products. Another interesting experience is the AMAP system ("Association pour le maintien d'une agriculture paysanne"), where producers and consumers create a direct partnership whereby consumers financially support the sustainable activity of one or several producers in return for a direct "monitoring power" of this activity and a direct exchange with the producer.

Networks are, moreover, an instrument for *innovation*, driven by production or distribution, in favour of consumers: contractual networks between grape growers and cooperatives for special projects; inter-phase networks between grape growers, final producers and distributors; organisational networks between producers for the creation of new products dedicated to specific markets, are several means for improving the quality of the products through the transmission of knowledge, experimentation of new techniques and products.

---

[37] See CREGO Study for ONIVINS, 2004. Ever since, some concentration has occurred, but the sector is still highly fragmented.

4.2.4. Response to the internationalisation of the market

In France, the decrease of consumption combined with the increase of imports of foreign wines has made it vital for wine producers to find new markets abroad. This issue appears in the case study as a crucial reason for networking, especially at the distribution level, but also at the production level.

At the distribution level, two main forms of cooperation have been seen, by "grouping" of activities towards foreign markets, or by specialization.

The grouping of distribution activities favours for-profit organisational forms: a company or an IEG is constituted to undertake the distribution abroad on behalf of several producers. This system allows a reduction of the costs induced by the research of clients abroad and by logistical aspects. It also makes the commercial offer more attractive for foreign buyers by widening the portfolio of wines available. The case study identified such networks between individual producers, and between cooperatives.

The specialization of the distribution activity has been met in the form of a mixed network: companies with capital links enter reciprocal distribution agreements whereby they commit to distribute to each other products in a geographical "zone of influence" defined according to their knowledge of the local market.

At the production level, there is at least one example of a for-profit organisational network (company) between final producers used in order to create products specifically adapted to foreign markets. The case study also shows that not-for-profit organisational networks, such as producers' associations, try to create dynamics for exportation, by providing services or information to their members. However, the opinion of producers on the efficiency of their actions is sceptical.

4.2.5. Conclusion: general trends in the evolution of the networks' missions

Analysing the role undertaken by networks, according both to their forms and to the moment they appear (production or distribution), leads to three main observations.

Firstly, in the Loire Valley, there is a "traditional" form of networking involving grape growers and individual producers, through cooperatives and not-for-profit associations. The missions of these traditional networks are evolving under the influence of the market. Cooperatives, usually pictured as "not-for-profit" structures, engage in innovative actions, both in production and distribution, in order to foster their competitiveness and profit. Professional associations, originally organised for the defence of producers, assume promotional activities and try to provide services to members at a lower cost. Generally speaking, "not-for-profit" networks, though still endorsing their traditional missions, tend to enter into a more competitive behaviour.

Secondly, such evolution is urged by the emergence of new forms of networks, more for-profit-type, driven by individual final producers. These new forms of networks tend to conduct the functions that were traditionally undertaken by wine merchants and cooperatives: to reduce production and commercialisation costs for small producers, and to allow them to make the market a sufficiently attractive offer (in terms of price - thanks to the reduction of costs - quality and variety of the products offered). This is certainly one of the reasons why the organisational form of networks prevails, as individual producers naturally tend to "duplicate" the traditional models.

Thirdly, the emergence of new forms of networks does not only entail an evolution for traditional networks, but also for wine merchants. Vertical and horizontal networks could provide interesting tools for wine merchants to face the (emerging) competition of the new for-profit-type networks created by individual wine producers. If some experiences of vertical networks driven by wine merchants have been evidenced, in particular in their relationships with grape-growers, it seems to lack really successful forms of horizontal networks between wine merchants or between wine merchants and cooperatives. At the horizontal level, mergers or acquisitions have apparently been preferred to cooperation through networks.

4.3. Factors influencing the emergence and the form of networks

Are there any particular circumstances fostering the emergence of networks, or of certain forms of networks? It arises from the case study that several factors (listed in the above table) influence, positively or negatively, the creation of networks. Some are related to the structure of the member firms (1), some to the activities of the member firms (2) and some to regulation (3).

Table 2 – Internal factors influencing networks creation

Internal factors	**Positive influence**	**Negative influence**
Governance	Cooperative forms (also tend to "externally network")	
Personal qualities of the entrepreneur	Young High level of professional qualification	Elder Low level of professional qualification
Size of the enterprise	Small (encourage cooperation to reduce costs and gain eco. Weight)	Micro (lack of finance, eco. weight, knowledge)
Quality of the production	In vertical relations (inter-phase)	In horizontal relations (between prod.; fear of "standardization")
Financial constraints (internal: low capitalisation)	Encourage the externalization of services	If too low
Innovation	Yes	

Table 3 – External factors influencing networks creation

External factors	**Positive influence**	**Negative influence**
Global competitiveness	Yes	
Level of trust	Yes	
Financial constraints (External: Access to credit)	Yes	If access too hard
Regulation	-DO Rules allow the creation of a "community" -Costs induced could lead to networks (see ODG) -Support measures (low) -Adequate legal forms (if partic. adapted to agricultural issues: see Regulation on GAEC or Coop.)	-Rules on customs -Fragmentation of regulatory bodies (institutional context) -DO Rules on territoriality of wine making/ bottling

4.3.1. Structure of the member firms

Among the factors influencing the constitution of networks, many are related to the structure of the participating firms. The *size of the firms*, firstly, is important: too big but also too small enterprises are less involved in networks than small or medium firms. This is to be linked to the influence of the *level of capitalization* of the firm: if the level of capitalization is low, this might encourage the externalization of services, and consequently networking (CUMA); but if it is too low, it is an obstacle to the participation of the firm to networks. The *governance structure* is also of some importance; for instance, it appears that cooperative companies, which are themselves networks, tend to more cooperate than commercial companies. Finally, the *personal characteristics of the managers* are essential: young managers with a high level of qualification are more willing to experience new forms of organization such as networking.

4.3.2. Activities of the member firms

The activities of the firms are also of some influence on the constitution or on the form of networks. Firstly, and at least according to the case study results, production firms are more collaborative, even for distribution purposes, than distribution firms. Secondly, firms tend to enter organizational networks when they cooperate on a horizontal basis (all firms operating at the same level of the production or distribution chain) and contractual networks when they cooperate on a vertical basis (firms operating at different level of the production or distribution chain). The quality of the products has a twisted influence on the emergence of networks: in vertical relationships, the more qualitative the product, the more likely the constitution of a network. But in horizontal relationships, the quality of the products may be an impediment to networks, which are sometimes perceived as instruments of "standardization" of the wine. Finally, innovation concerns apparently encourage producers to participate in not-for-profit organizational networks, whereas for-profit networks for innovation purposes seem to be very rare.

4.3.3. Regulation

The regulation of the wine sector in France is dense (see above section 2), and this regulation is not neutral in terms of the constitution of networks. Other regulation, not specifically designed for the wine sector, may also be of importance.

With 81% of its production being DO wine, the Loire Valley is a good example for examining the impact of *DO regulation*[38] on the emergence of networks. Indeed, DO territories have always been the natural places for the creation of "communities" of producers sharing the same concerns. These communities have organised into not-for-profit networks: the associations of producers for the defence of the DO. However, cooperation between members of these associations was informal, mainly based on non-organised exchanges of good practice. As for the associations themselves, they were more or less service and information providers, and above all organisations in charge of negotiation with wine merchants in the context of the inter-branch organisation, INTERLOIRE. The compulsory contract regulation imposed by INTERLOIRE (standard forms of contract to be use in DO transactions) does not seem to have any sort of effect on the creation of networks. As they are poorly detailed, these contracts have more of a market control purpose (through registration) than any kind of effect fostering cooperation between grape growers and wine merchants. This is true to the extent that contractual networks, when they exist, are organised on the basis of long term framework contracts which are not submitted to any sort of regulatory standard.

However, recent changes in the DO regulation, modifying the agreement system, could foster cooperation. Until now, wines proposed for commercialisation under the DO received an annual agreement, depending on the results of tests made on a random selection of samples, and delivered by a public body, the INAO. According to the new system, producers receive (or not) a general certification allowing them to produce DO wine. Their activity is then monitored by a private body, the ODG ("Organisme de défense et de gestion") which is constituted by the association of producers

[38] The G.I regulation ("vins de pays") has a similar impact, which will not be dealt with in this paper.

for the defence of the DO. The ODG has the power to conduct internal audits of the certified exploitations, and to deliver recommendations to producers in breach. Such an evolution could allow associations of producers and ODG to become efficient networking structures dedicated to the implementation of techniques and products, through a more formal exchange of good practice between members (recommendations). This intuition will have to be confirmed / refuted according to the actual implementation of the new rules. However, DO regulation can also have a negative impact on the constitution of networks. For instance, some decrees for the recognition of DO subject the possibility for a producer to use the DO to the compliance with territorial conditions regarding wine making or bottling. With the purpose of preventing fraud, these conditions are a source of rigidity for producers and an impediment to the constitution of networks. This is particularly true in a region such as the Loire Valley, where many DO coexist on a small territory: three producers, with adjacent properties, will not be able to share the bottling equipment if they produce different DO for which bottling on the territory is imposed.

The case study reveals that the prevalent form of network is the organizational one. This can partly be explained, as mentioned above, because traditional forms of networks were organizational (cooperatives and associations of producers). Emerging forms tend to duplicate these models. Yet regulation is also a relevant explanation. *French legislation* provides many forms of organizational devices that can be used by producers and distributors for cooperation purposes: cooperative companies, commercial companies (esp. SARL), civil companies (including those specifically for agricultural activities: SCEA, GAEC), IEG, associations. These models are attractive (for instance because of low capitalisation requirements), and perceived as non-hierarchical (in the new for-profit organizational forms of networks observed, it is striking that a unanimity rule is usually respected). Moreover, operators consider that these rules are easily accessible and understandable, whereas they show more complexity as regards contract rules. One explanation is to be found in the type of legal advice to which producers (except for big firms) have access. Lawyers are not usually present (being seen as litigators more than advisers). Legal information is provided by associations, accountants and public notaries, whose knowledge favours the organisational form of networks more than the contractual one. Contractual networks have been found only in situations where at least one firm of a sufficient size (to access legal advice) was involved.

5. Perspectives and Conclusions

This chapter intended to highlight, on the one hand, how networks are been used to provide relevant answers to the main economic changes in the Loire Valley wine sector, but also, on the other, how the emergence of networks is capable of transforming profoundly the wine sector and of having a virtuous effect, by fostering more cooperation between operators and, subsequently, a better competitive position. It has been emphasised that networks of final individual producers: 1) impose some changes for the traditional forms of cooperation, notably cooperative forms, which tend to become more for-profit-type; 2) might lead to the constitution of networks where they were traditionally not found, namely at the level of wine merchants. How the traditional not-for-profit networks, such as producers' associations, might increase their efficiency under the influence of recent changes in the regulation (DO) has also been discussed. However, the case study has revealed the reluctance of LSD firms to engage in cooperation with producers. It is doubtful that the recent changes in the French legislation on distribution (“loi Chatel”) will have any positive impact.

ANNEX I
LOIRE VALLEY (including Région Centre and Vendée)
Volumes of production - 2007
Table created according to: *Viniflhor Stats* 2008 (Source: DGDDI)

Total production France 2007 (harvest)	40,315 million hl
DO Production France 2007	23,206 million hl (57.56% of total)
Total production Loire 2007 (harvest)	3,005,000 hl[39]
DO production Loire 2007	2,437,000 hl (81%)
G.I Production 2007 (Vins de pays)	407,000 hl (13.54%)
Table wine production 2007	163,000 hl (5.4%)

ANNEX II
LOIRE VALLEY (including Région Centre and Vendée)
Vineyard surface area - 2007
Table created according to : *Viniflhor Stats* 2008 (Source: DGDDI)

Total Surface Area France 2007	823,799 ha
Surface Area France 2007 dedicated to DO	480,236 (58.29%)
Total surface area Loire 2007	59,100 ha[40]
Surface area dedicated to DO	48,400 ha (81,9%)
Surface area dedicated to other wines	10,700 ha (18,1%)
Estimated surface area dedicated to GI (vins de pays)[41]	6,000 ha (estimation)
Estimated surface area dedicated to table wine	4,700 ha (estimation)
Average surface area of exploitation 2007[42]	3.3 ha

39 The total of the production does not perfectly accord with this data. The data provided for by Viniflhor has been kept in its original version.

40 Part of the surface area of Loire Valley vineyards is not dedicated to commercialization, but only to self consumption. In 2004 (Source: Viniflhor), the surface area of this part was around 5,000 ha. We do not have an update for 2007, and do not know whether this part is or is not included in the total surface area indicated by the *Viniflhor Stats* 2008.

41 This data has not been found: the estimation is made according to 2004 data (9,000 ha for GI and 9,000 ha for table wine), and the volumes of production.

42 This data has been obtained by dividing the total surface area (59,100 ha) in 2007 by the number of declarations of grapes collecting (17,900 in 2007, Viniflhor Stats 2008). An important number of grape growers collect grapes only for self consumption. In 2004, Viniflhor indicated that 25,000 exploitations shared 5,000 ha for self consumption production, whereas 8,000 producers exploited 65,000 ha for commercialization purposes. This means that the average size given does not reflect the reality of the "normal" size of a professional exploitation, nearer to 10 ha.

Chapter II
Inter-Firm Networks in the Italian Wine Industry: Three Case Studies in North East and South Italy (Trentino, Verona, East Sicily)

by Fabrizio Cafaggi, Paola Iamiceli, Marco Gobbato[43],
Federica Casarosa[44], Matteo Degasperi[45], Chiara Ferrari[46]

1. The Economic Context

The Italian section of the research on inter-firm networks in the European wine industry has concerned three areas:

1. the Trentino province (north east Italy)
2. the province of Verona (north east Italy)
3. the provinces of Catania and Ragusa (east Sicily, south Italy).

Without any attempt to consider these areas as representative of the Italian landscape at large, these have been selected for the different structures and characteristics of the production and distribution models that they contain, as can be seen below (see par. 2).

The more general conditions of the Italian wine sector have been taken into account to the extent that this has been allowed by the methodology of the research (see chapter VI on Comparative Analysis).

In 2008 Italy was the largest wine producer worldwide with a **total production** of 41.4 million ht47. In 2007 Veneto was the Italian region producing the most wine, with an overall production of 7.7 million ht, while Sicily was the fourth largest (4.5 million ht) and Trentino was the 14th with a production of 0.8 millions of ht48. It should be noted that, while the provinces of Ragusa and Catania account for 1.99% and 2.78% respectively of the overall production of Sicily49, the province of Verona produces 35% of the Veneto's total production50.

From 1995 to 2004 the production of wine reduced by 20.1%, compared to 1.9% in France and 12.2% in Germany51. In the same period consumption decreased by 17.9%. Italy shows the same dynamics of other European countries which have registered a reduction of wine consumption in the last few years. According to Istat, the **total area** devoted to the cultivation of vineyards in Italy is 731,071 ha, while in Trentino it is 10,050 ha, in Verona 24,577 ha, and in Catania and Ragusa 1,500 ha52. Italy

---

43 University of Trento (marco.gobbato@unitn.it).

44 European University Institute (federica.casarosa@eui.ue).

45 Chamber of Commerce of Trento, PHD at University of Trento (matteo.degasperi@tn.camcom.it).

46 University of Trento (chiara.ferrari@unitn.it).

47 Source: OIV Forecasts, 2008.

48 Source: Istat, 2007. Trentino is considered separately from Bolzano.

49 Source: Agricultural Department of Sicily/Agea, 2008.

50 Source: Veneto Region, Statistical Department, 2002-2004.

51 See Pomarici and Mariani, *Il mercato del vino: evoluzione e scenari*, in Albisinni (a cura di), *Le regole del vino: disciplina internazionale, comunitaria, nazionale*, Milano, Giuffrè, 2008, pp. 97-134. In Australia, China, Chile and New Zealand the production of wine had dramatically increased (149.5%, 126.7%, 95.2% and 96.6% respectively). In Europe the production of Spain had increased by 60.4%.

52 Source: Istat, 2009.

produces 35% of p.d.o. wines, 29.4% of p.g.i. wines and 35.6% of table wine53. The three examined cases present quite different values as regards these ratios. Indeed, p.d.o. production is more relevant in Trentino than in the other cases. In the province of Verona, the share of table wine is again very small, while there is a relatively more balanced ratio between p.d.o. and p.g.i. The share of table wine significantly increases in Sicily.

Tab. 1 – Types of wine in the areas analyzed by the research

Type of wine	Italy	Trentino	Verona	Sicily
D.O.	35%	81.60%	52.90%	3.90%
G.I.	29.40%	17.90%	32.10%	29.10%
Table wine	35.60%	0.50%	15%	67%
Total	100%	100%	100%	100%

Source: Istat, 2007

Trentino is characterized by the highest production of p.d.o. wines in the three cases. Verona is also a province that mainly produces quality wine. In Sicily we have a different scenario: the production of table wine is highest. The Province of Catania produces 9.2% of wine devoted to the production of p.d.o. Etna (the only one in the province of Catania), while in Ragusa the production of p.d.o. wines is 5.2% of the production of the province[54].

In the last few years an intense and ongoing process of internationalization has affected the industry: since 2002 the increase in import-exports has been significant (more than 10% per year), given an increase of 48% in quantities traded in the last 15 years. Currently, the **level of export** for Italy is 38.8%, while it is 13% for Trentino, 28% for Verona and just 3% for Sicily[55]. The high quality wines have a leading role and increased their value by 60.7% from 1996 to 2005[56].

As in many other European countries, the **structure of property** in Italy is very fragmented. The average size of vineyards is 1.5 ha in the country as a whole, 1.1 ha in Trentino, 1.5 in Veneto and 2.7 ha in Sicily[57]. The land is exploited mainly by wine makers in form both of cooperative or non-cooperative enterprises. In Italy cooperatives produce 50% of the total amount. Between 2002 and 2008 the number of cooperatives declined (-61), but this was dependent on size: the number of medium size cooperatives declined, while it has been increased the number of small cooperatives and the number of bigger ones[58].

As seen in more detail below (see the following par. 2) the weight of cooperatives in the three cases varies. In Trentino they are very relevant, in Verona they are relevant too, but to a lesser extent. Finally, in Sicily cooperatives have a greater presence in the west of the island than in the areas examined by the research.

53 Source: Istat, 2007.

54 Our elaborations on data provided by IRVV Palermo (2007).

55 Source: for Italy Eurostat 2007; for Trentino CCIAA of Trento (2005), for Verona CCIAA of Verona (2004) and of Sicily, Istat (2004).

56 Source: Unioncamere, 2007.

57 Source: Eurostat, 2007.

58 Source: Agea, 2008 in Pomarici, *La cooperazione nel vino: elementi per una analisi strutturale* paper presented at conference on *Cooperative e cantine sociali: tra crescita e globalizzazione*, Firenze, 4 dicembre 2009. Small cooperatives produce less than 1,000 ht, while bigger cooperatives produce more than 50,000 ht. See, as regards the expectations concerning cooperatives, Pomarici – Mariani (eds.), *Strategie per il vino italiano. Una ricerca de "L'informatore agrario". Costruzione di un documento di riflessione strategica per il settore vitivinicolo italiano*, ESI, Napoli, 2010, p. 67 ff.

The property of non-cooperative firms are mostly family-owned[59]. The internal governance is based also on the family direction, even if some cases of external directors were observed.

Such considerations can be useful also to describe the **structure of the production chain**. In Trentino the most common model is large first-tier cooperatives which sometimes are members of second-tier cooperatives. The non-cooperative enterprises are vertical integrated. Only the producers of higher dimensions buy grapes or musts by third enterprises while keeping the rest of the production process in-house. In Verona, aside from cooperatives, there are many more non-cooperative enterprises which buy outside grapes or bulk wine for producing the wine. A sub-group of bigger enterprises tends to purchase wine from different regions for pursuing diversification strategies. In Catania and Ragusa the model of the vertically integrated enterprise is prevalent, and the cooperatives are relatively small.

The **structure of the distribution chain** differs according to the channels.

At the national level the majority of the wine is distributed through the off-trade channel (60%)[60]. This segment is composed by the Ho.Re.Ca. (hotel, restaurants, catering), traditional retailers and specialized retailers. The other channel is large scale distribution (LSD). In the first channel the wine is distributed directly by the final producers (through agents) or, mainly (90%), by the intermediation of wholesalers. Final producers tend to establish direct relations with large distributors even if the distributors can also rely on intermediate enterprises as wholesalers[61].

Large scale distribution has increased in recent years and, in terms of quantity, is currently the prevalent model. In 2005, 56.4% of the wine was distributed by Super and Iper while a further 12.7% by "discounts"[62]. Final producers generally deal directly with LSD; however sometimes agents are also involved in sustaining the collateral promotion activity, mainly at the international level.

Large scale distribution has been characterized by an increasingly concentrated process: the distributors are usually clustered under "purchase groups" which centralize the demand for wine thus increasing the contractual power of the final producers[63]. In Italy the five biggest large distributors have 64.8% of the total market share, while the "purchase groups" have 93% of the total market share[64].

The distribution of private label products is increasing even if it is not so common as it is at European level. On average in Europe 23.9% of the total products are distributed under the trademark of the distributor, while in Italy the average is around 13.5%[65]. In the wine industry private labeling is also increasing, counting for 20% for the brick wine and 3% for the 0.75 l bottles[66].

---

59 See Mediobanca, *Survey on the wine sector*, 2009; M. Faccio – H.P.L. Lang, 2002, *The ultimate ownership of western European corporations*, Journal of Financial Economics, 65, pp. 365-395. For Italy see Zanni – Cordelo di Montezemolo – Devigili, 2008, *Long Lasting Wineries: Managing Family Business and Succession in Tuscany Region*, paper presented at Fourth International Conference of the Academy of Wine Business Research, Siena, Italy.

60 The off trade channel includes all retailers which sell wine for take-away consumption

61 See Federvini, *Analisi sistemico-territoriale della filiera vitivinicola estesa italiana: alla ricerca del valore specifico del modello Italia,* 2007.

62 See Pomarici – Boccia, *La filiera del vino in Italia: struttura e competitività*, in Cesaretti – Green – Mariani – Pomarici (eds.), *Il mercato del vino. Tendenze strutturali e strategie dei concorrenti*, Angeli, Milano, 2006, 142-189; Repetti, *Le reti distributive del vino*, Vigne Vini rivista italiana di Enologia, Viticoltura e Mercati, 4, 2006.

63 See Pomarici – Mariani – Raia – Borrelli – Napoletano (a cura di), *Costruzione di un documento di riflessione strategica per il settore vitivinicolo italiano*, Informatore agrario, 2008, p. 46 ff.

64 See Federvini, above note 14.

65 Source: Business Insight, 2007.

66 See Federvini, 2007, above note 15.

At the international level winemakers distribute wine mainly through importers, intermediary enterprises or agents (67.1%)[67], to large scale distribution or specialized shops (11.2% and 11.1% respectively) and marginally to restaurants and catering (7.7%)[68].

2. *From Inter-Firm Collaboration to Networks: A General Overview*

The three Italian areas which have been investigated present different models of production and distribution.

The **Trentino** province is characterised by the large presence of grape-growers' cooperatives and by the existence of a second-tier cooperative company, in which the majority of the aforementioned first-tier cooperatives participate. This scenario covers approximately 83% of total production in the province. "Private" producers are mainly small family businesses; some of these represent niche producers and are often inclined to complement their offer with the production of premium wines, not necessarily in the area of denominations of origin, while the production of p.d.o. wines is dominant in the province (see table n. 1).

The province of **Verona** presents a more diversified scenario. Grape growers' cooperatives are still important (they represent approximately 65% of the total production), but "private" producers have a larger share. Among them, a few medium enterprises are included, with a stronger inclination to export and a more market-oriented approach to wine making. A more balanced ratio between p.d.o. and p.g.i. production emerges (see table n. 1).

The eastern part of **Sicily** is characterised by a low incidence of the cooperative model and a larger presence of (generally small and family owned) enterprises that integrate grapes and wine production as well as bottling. Grapes and bulk wine sales are not absent, even if the majority of the production is directly carried out by integrated producers. As in other parts of Sicily, table wine production is more important than in other Italian regions and p.d.o, production is relatively limited (see table n. 1).

As to the distribution chain structure, while direct distribution by final producers is quite low in the north east provinces, it is relatively more important in the observed areas of east Sicily[69], where local distribution is, in any event, more developed than national and international distribution.

Within this picture the research permits the observation that **inter-firm collaboration** is a key to the production system in the areas of north east Italy examined, while it is more limited in the Sicilian provinces studied, where a sort of dualism is emerging: with a majority of micro enterprises unable to invest, mainly for lack of financial tools, and a minority of relatively larger enterprises, which have had such an opportunity to invest but rarely pursued collaborative strategies. This is a case in which, although in principle inter-firm collaboration might be established among diversely equipped enterprises in order to pursue common goals of growth, the high degree of competition at the local level has hindered the opportunity to collaborate locally in order to compete more effectively at national and international levels. Other elements in the political and institutional context have probably discouraged a different approach in the past, enabling state subsidies to cover enterprises' operating loss. Finally, the less relevant role of local institutions (such as enterprise associations, consortia, research departments etc.) able to provide an adequate offer of services to the enterprises has contributed to increasing the costs of cooperation, while in the other examined areas these

---

[67] The importers and distributors purchase and resell the wine, while the agents are merely intermediary enterprises which do not bear the risk connected with ownership. However, the research shows that also in the former case parties may agree on a different allocation of risk.

[68] See Federvini, 2007, above note 14.

[69] It was not possible to find public data on this aspect. Looking at the situation of interviewed enterprises, direct distribution covers on average 23% of their sales, while this value amounts to 12% and 9% for the enterprises that have been interviewed in Trentino and in the province of Verona, respectively.

organisations have played an important role, at least as possible "incubators" for the creation of partnerships, and have favoured some pre-competitive knowledge transfer, as a preliminary ingredient for inter-firm cooperation. Where services are provided in the Sicilian areas examined, they are more devoted to the promotion of the local production system at the international level than to provide incentives for local cooperation.

Similar dynamics emerge when, more specifically, **networks** are taken into account. Networks are generally limited in the areas of east Sicily examined, while they emerge to a larger extent in the north east Italian provinces examined. In any case, although we found more networks than expected, we should conclude that inter-firm networks do not represent a widespread entrepreneurial model, yet.

The **array of network models** also varies across the areas.

In east Sicily few examples of contractual networks and cooperative companies have been found: these represent the "basic" models of networks, as have been found in any of the observed areas of the European research (see chapter VI on Comparative Analysis).

In the province of Trentino, the majority of networks have a cooperative form. Within other types of networks (mainly the contractual and the mixed ones) a tendency to mimic some of the features of the cooperative model (e.g. the exclusivity of the relationship between the knot and the network) has been detected.

In the province of Verona, not only enterprises show higher inclination to form networks, but the research observes a larger array of network models, with a higher presence of for-profit company networks and mixed networks. A more prominent hybridisation among forms emerges, together with the former examples of networks combining different actors within the production chain, such as cooperative companies on the one hand, and private producers on the other.

3. Inter-Firm Collaboration and Networks along the Production Chain

The three Italian case studies permit the observation that stable **contractual relations** in grape and bulk wine supply (the former more so than the latter) represent a key element of the production strategies of interviewed enterprises. From the perspective of the interviewed enterprises, the quota of stable relations (lasting for more than three years) is generally quite high, already in the segment of bilateral sale contracts[70]. It should be observed that the stability, though quite common, is not normally the result of legal commitment to buy or to sell, but a factual element of the contractual relation.

Tab. 2 - Stability of contractual strategic relationships in production

	Trento	**Verona**	**Catania - Ragusa**
Percentage of stable relationships	59.2%	68.0%	78.8%
Respondents	***26***	***22***	***12***
Note: percentages refer to the number of strategic relationships characterized by stability of the number of total relationships that each enterprise entered for buying or for selling grapes or wine. Answers of both buyers and sellers of grapes/wine were collected.			

While grape supply relations tend to be more stable than bulk wine supply relations, a different picture emerges in the province of Verona, where the bulk wine trade is becoming comparatively more relevant.

70 Of course this data should be complemented with information concerning the participation of cooperatives, where the stability of the exchange of goods is normally ensured through membership.

Tab. 3 - Stability of contractual strategic relationships in production (grapes and bulk wine considered separately)

	Trento		Verona		Catania - Ragusa	
	Grapes	**Wine**	**Grapes**	**Wine**	**Grapes**	**Wine**
Percentage of stable relationships	97.80%	45.20%	58.60%	78.80%	78.50%	-
Respondents	***11***	***15***	***10***	***12***	***11***	***-***
Note: percentages refer to the number of strategic relationships characterized by stability of the number of total relationships that each enterprise entered for buying or for selling grapes or wine. Answers of both buyers and sellers of grapes/wine were collected.						

A more selective approach is taken (when other elements are taken into account) in order to qualify these relations as strategic (particularly: exclusivity, co-determination practices, low replaceability of one or both parties). The research shows that strategic relations represent a relatively small sub-group of contractual relations in the production chain.

It is important to note that the highly collaborative nature of these relationships does not entail a lack of formalisation. On the contrary, strategic relations are normally based on written contracts, though not very detailed.

Tab. 4 - Legal form of contracts regulating strategic relationships (grapes and bulk wine sales)

	Trentino	**Verona**	**Catania - Ragusa**
Oral contracts	21.10%	22.20%	20%
Contracts in writing	78.90%	77.80%	80%
Total (oral and in writings contracts)	100%	100%	100%
Respondents	***19***	***18***	***10***

Some of these strategic relations evolve from mere contractual collaboration to more complex settings due to the governance of some types of interdependence among the producers in accordance with the notion of **network** (see the Introductory chapter in this paper). Other networks have been found in these areas, regardless of the existence of previous contractual relations among the parties.

3.1. Network structure and legal forms

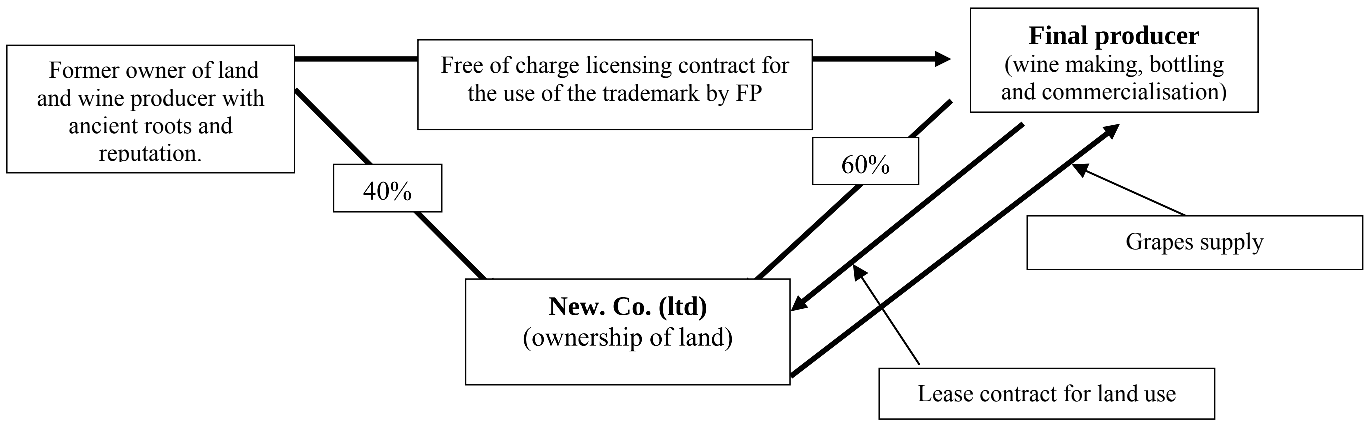
Along the production chain, three types of networks have been found, as regards structure and legal form:

- **contractual networks**, normally established through the links among bilateral contracts for the sale of grapes or bulk wine (the former more often than the latter) and the provision of instrumental services, mainly agronomic and oenological; here, coordination across the network is mainly due to a *de facto* leadership as recognised in the final producer, negotiating with a number of selected suppliers, ensuring consistency in the determination of product and process characteristics, organising informal collective training sections for suppliers, often requesting exclusivity and providing monetary incentives in accordance with a coordinated plan within the network; the multilateral dimension of the contractual network is more in the factual nature of the relations than in their legal status, while no examples of multilateral contracts, as legally intended, have been found in any of the case studies;
- **organisational networks**, in which the partnership among enterprises is incorporated into a new entity, in particular:

    – a *cooperative company*: this is the most widespread model, especially in the form of grape-growers' cooperatives (first-tier cooperative), while second-tier cooperatives tend to play a more prominent role in Trentino than in Verona, and have not been found in east Sicily;
    – a *for-profit* company: examples have been found in Trentino and in Verona as well as in Sicily (though outside of the area examined by the research and with the participation of an enterprise from the province of Verona);
- **mixed networks**, combining contractual and organisational devices: these are often (but not always) the evolution of previous contractual relations, stabilised through the participation into a co-owned company: examples have been found in the province of Verona, but not in the other areas.

As explained above, the province of Verona shows a larger array of network models and high degree of organisational innovation.

Fig. 1 - Example of mixed network in the province of Verona



3.2. Scope of the networks along the production chain

The function of the networks that have been found in the Italian case studies varies in accordance with the stage of the production chain.

(1) In the first part of this chain, when the focus is on agricultural activity, as in other contexts examined by the research, networks mainly represent a **response to ownership fragmentation of land and agricultural firms**. To this end both contractual networks and grape-growers' cooperatives are directed, though in different ways and with different degrees of relevance across the examined regions (see par. 2). In both types of networks grape growers can rely to a reasonable extent on future grape purchase (by the final producer, leading a contractual network, or by the cooperative) and in both cases the network allows supply planning that in turn enables specific investments and service provisions in favour of grape growers: all this would not be feasible (or not in the same way) where grape growers have to face the market autonomously. The Italian case studies do not present other types of response to land and ownership fragmentation. However, some Italian cooperatives are considering the adoption of a form of sharing of land use or machinery use, that, in a different setting, would display similar functions to the ones characterising the French models of "Scea" or "Cuma" (see chapters I and VI in this paper).

(2) The function of coordination and integration of production characterises networks at further stages of the production chain as well. Here, the research has highlighted a critical balance between cooperative and competitive dynamics. At this stage of the chain, when the process is definitively industrial, the collaboration normally consists of the creation of a **common wine** bottled through

common bottling facilities and labelled under the name of the network in a way which generally allows the knots to keep competing on the market for the other wines produced. This type of network has been found in Trentino and in Verona, but not in east Sicily, and is often structured as a second-tier cooperative or for-profit company. The for-profit form is preferred where the number of participants is limited and their initial contribution in setting up the network is clearly diversified; the cooperative form is adopted where the number of participants increases and their different contribution to the network's development is not *ex ante* observable. The research shows that, given the coexistence of collaborative and competitive dynamics, the governance of the network plays a critical role in the enforcement of cooperation obligations, while an excessive allowance of internal competitive behaviour (e.g. by softening duties to confer minimum amounts of product) could significantly infringe the stability of the network and its ability to enhance members' competitiveness in the market.

(3) Other types of networks do not specifically characterise a given stage of the production chain but are established **to coordinate the whole production process vertically in accordance with given standards, normally quality and/or safety standards**. These are generally contractual networks, established through the link between coordinated bilateral contracts among grape growers, final producers, oenologists, bottlers, and sometimes importers or other distributors. As to quality standards, the rules concerning the production of p.d.o. wines certainly aim to increase the attention of producers concerning a strict monitoring of the production chain with regards to the several suppliers. The research shows that networks aimed at implementing these rules and optimising efficiency and efficacy of monitoring are not limited to p.d.o. wines, as they are also employed in the production of wine (including table wine) under the **"private" label** of large distribution chains[71]. Examples of these networks have been found in north east Italy, as developed not only at national but also at the international level. It cannot be excluded that similar examples exist in east Sicily as well, where, as in all the examined cases, few local contractual networks have been identified for the supply of highly selected grapes by a number of exclusive suppliers.

(4) A fourth important function of productive networks is **service supply**. Unlike other contexts examined (the Loire, for examples), the Italian section of the research has rarely identified networks whose main or exclusive function consists in the provision of services for the production of wine (similar conclusions can be derived with regards to services for distribution as well). In particular, agronomic, oenological, and innovation-related services are mostly provided by individual professionals, well-reputed public-private institutions operating laboratories and conducting R&D activities (so in Trentino), by the cooperatives themselves (at least for more standardised services and much less so for innovation-related services), and by other producers (mainly the prospective buyers). This evidence can only be extended to east Sicily to a limited extent (especially with regards to R&D laboratories), given the different institutional context. Then, if on the one hand many of the production networks mentioned above do play a relevant role in terms of service supply, this role is not normally disconnected from the main function of the network, which is the coordination of the supply of goods (grapes, bulk wine), and only instrumentally services. A complementary presence of networks specialised in non-standardised service provision might add flexibility and competitiveness to the wine supply chain (see below, par. 5, and chapter VI in this paper).

3.3. Local, national and international networks in production

It is important to underline that most of the productive networks which have been observed in the Italian case studies develop at the local level. A few examples of networks show an inclination of

[71] From a comparative perspective it should be mentioned that, among European countries, in Italy there is the smallest market share for private label products (17%), compared to France (34%), Germany (40%), Spain (39%), Portugal (34%), United Kingdom (48%). See http://www.plmainternational.com/en/private_label_en2.htm. Data concerns all sectors. See also notes 19 and 20 above and corresponding text.

enterprises to establish partnerships at the national level (this mainly happens at an intermediate stage of the production chain with regards to bulk wine supply more than to grapes supply). These normally reflect the interest of the producer in enlarging its wine portfolio to increase competitiveness vis-à-vis distributors.

The inclination to create international partnerships in production is even more limited. More common is the creation of networks among co-national producers for the production of dedicated brands for specific markets, or for export in general. Partnerships between Italian and foreign producers are quite rare, but a few examples have been identified, again concerning producers from north east Italy. These are cases in which the production is generally and completely carried out in Italy, while the role of the foreign producer (sometime coupled with an importer) mainly consists in determining the characteristics of the product with regards to the trends of the destination market.

3.4. Evolutionary dynamics: the relationship between cooperative companies and private producers in the Italian case studies

As explained, the three areas examined in the Italian case studies have been selected also for their different productive structures. Indeed, one of the aims of the research was to verify whether the structure of the productive chain influences the formation of networks and their functioning.

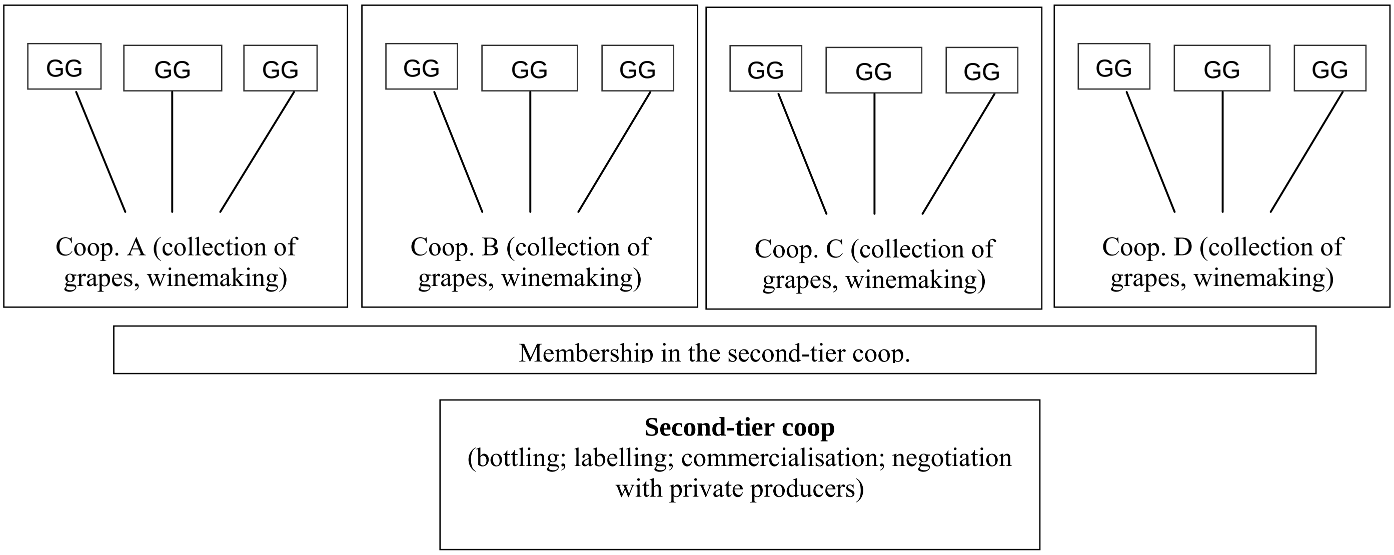
The following table summarises the main findings of the research from this perspective.

Table n. 5 – Cooperative propensity to crate networks

	Role of grape growers' cooperatives (compared with "private" producers)	***Propensity to create networks; diversification of network models; mixed networks among coops and private producers***
Trentino	Majority share of production (83%)	High propensity to create networks if compared with other regions. Lower diversification of models. Contractual networks tend to mimic some of the characteristics of cooperative networks.
Verona	Relevant share of production (65%)	High propensity to create networks if compared with other regions. Higher diversification of models. Unique examples of mixed networks among coops and private producers.
East Sicily (Catania – Ragusa)	Marginal role.	Low propensity to create networks

The cooperative model is not only more widespread **in Trentino and in the province of Verona** (being absolutely dominant in the former case), but it also presents competitive advantages if compared with the cooperative model as implemented in east Sicily. A higher number of members, exclusivity and duty of providing the total production of grapes, stronger capitalisation, and a more advanced process of industrialisation (with internal facilities for bottling): these are the main factors explaining the growth of the cooperatives in these regions. In Trentino, more than in the province of Verona, this growth was also possible thanks to significant support from the local government and by the local cooperative companies' federation in terms of both financial subsidies and services. This situation allowed the cooperative system to pursue further development strategies, as manifested by mergers (more in Verona than in Trentino), formation of second-tier cooperative companies, formation of corporate groups with the constitution/incorporation of bottling, and merchant and distribution companies, controlled by the first-tier or second-tier cooperative.

Fig. 2 - Example of second-tier cooperative network in Trentino



On the contrary, **in east Sicily** cooperatives have strongly suffered from the abandonment of land, lack of capitalisation, and low return on bulk wine sales due to high competition in their segment of production; local government support has not been lacking but, being disconnected from any guarantee on market sustainability of production, has not served to avoid situations of final distress. In this context, "surviving" cooperatives feel forced to allow members higher flexibility: no exclusivity and total conferment duty is imposed, and members can preserve their status also in cases in which their production (and conferment) is extremely marginal due to poor or non-remunerative harvests. In some cases, however, successful outcomes are achieved and the rule of no total conferment duty is preferred for other purposes (e.g. allowing the members to access new markets with their own production, thus opening some commercial channels also for the cooperative itself).

The different degree to which the cooperative model characterises the production system in the two north eastern Italian provinces affects the **relationship between cooperatives and private producers**. While in Trentino some form of collaboration exists to the extent that some private producers rely on long term supply contractual relations with cooperatives, in the province of Verona some unique examples of networks composed of cooperatives and private producers emerge, where a more intense collaboration tends to take advantage from the synergies arising from the mixture of two originally different productive models: this strategy favours mutual learning and organisational innovation. Neither form of collaboration was detected in east Sicily, while an example of a mixed network, in which a private producer of the Verona province and a Sicilian cooperative participated, has been found in the western part of the region.

4. Inter-Firm Networks in the Distribution Chain

As regards distribution, the Italian wine sector faces the same challenges as those faced by most producer countries in the global market.

As introduced in the economic context (see par. 1 above), the most important change in the distribution of wine is the increase of large scale distribution and the increasing concentration in "modern distribution". Concentration among distributors is a widespread phenomenon in the European market, although in Italy it is not as relevant since LSD has the smallest market share as compared to other European countries[72]. These changes are partially influenced by the global economic crisis, whose impact may lead to a further reduction in the amount of wine distributed in the Ho.re.ca. channel in favour of an increasing consumption in large distribution[73]. By now, it seems that the crisis has also affected the distribution of value along the supply chain by reducing the prices paid by distributors to producers[74].

From this perspective the ability of producers to gain access to new markets or to reinforce their position in already-known markets are issues of primary importance. Of course in principle there are many responses to these challenges. We focus here on those approaches related to governance of the distribution chain, and to the relationship between producers and distributors, the choice of legal forms and rules that regulate this relationship, affecting the allocation of power and value along the chain.

Having regard to the main evidence coming from the Italian case studies, two main phenomena should be highlighted in terms of strategies pursued by final producers:

- **vertical integration** through the creation or the acquisition of distribution companies, as owned by single final producers aiming to gain access to a particular foreign market without being forced to rely on the intermediation of importers or sales agents;
- the creation of **networks** as tools to reduce the fragmentation of the wine supply, and in this way reinforcing producers' position *vis-à-vis* distributors as well as increasing the chain's efficiency in terms of transaction costs, logistics and access to other instrumental services.

Of course, the first type of strategy requires financial resources, volume of supply and managerial skills which are not available for most producers in the observed landscape. The enterprises opting for this strategy are mainly medium sized enterprises, sometimes cooperative companies. In any case, though implemented for some of the markets, this cannot be a general response able to be replicated for any targeted market.

With regards to the latter strategy it should be mentioned that the Italian case studies have shown that the existence of networks along the distribution chain is (still) quite limited, especially if compared with the array of examples identified as regards production.

Among those which have been found, different models can be recognized.

Inter-firm networks which are promoted or participated in by final producers as tools for increasing their competitiveness in the relationship with distributors are either:

- established among final producers (*horizontal networks*), or
- established between producer(s) and distributor(s) (*vertical networks*).

The evidence collected during the Italian case studies shows that vertical networks are normally participated in by distribution enterprises, which are specialized wine (or beverage) intermediaries, as distinguished from either Ho.re.ca. business and large distribution chains. As in other case studies within the European research, no vertical distributive networks have been found in which final producers and distributors of these two channels co-participate.

As shown below, vertical networks might be promoted by distributors as well.

[72] Federalimentari, *Scenari alimentari ed evoluzione rapporti Industria – GDO*, presentazione Unindustria Treviso, 2009, mimeo.

[73] See Pomarici – Boccia, *La filiera del vino in Italia: struttura e competitività*, in Cesaretti – Green – Mariani – Pomarici (eds.), *Il mercato del vino. Tendenze strutturali e strategie dei concorrenti*, Angeli, Milano, 2006, 142-189; Repetti, *Le reti distributive del vino*, Vigne Vini rivista italiana di Enologia, Viticoltura e Mercati, 4, 2006.

[74] See data provided by ISMEA (2010) in www.ismea.it. The prices in the wine sector dropped by 19.5% during 2009 (the most relevant decrease after that concerning cereals – 28.2%).

If they are part of vertical networks, large scale distribution enterprises and Ho.re.ca. businesses are often part of horizontal networks.

Unlike the case for production networks, we preferred to analyze first the networks' function, then their local, national or international dimension, and finally their legal forms.

4.1. Scope of the networks along the distribution chain

As introduced above, networks may be promoted either by final producers and/or by distributors.

Of course the pursued aim is generally different, though not necessarily conflicting.

Indeed, most of the observed networks can be considered as instruments directed **to reduce the fragmentation of the wine supply** due to be distributed in the market. Both final producers and distributors take advantage of this coordination, which lowers transaction costs, improves the efficiency of logistics, and enables some economy of scale and scope in the provision of marketing and other distribution-related services.

This convergence of interests should in principle generate a number of vertical networks, in which producers and distributors collaborate for a common goal. Alternatively, again in principle, we should find situations in which distributors promote the formation of networks among final producers.

In fact, the research shows that in the Italian cases examined, vertical networks are quite limited and horizontal networks among producers are more driven by the urgency of reducing the asymmetry of power with regards to distribution, than by the proposal of any given distributor. Indeed, from the perspective of final producers, the **coordination of comprehensive wine portfolios** is the main instrument to improve the competitiveness of their offer *vis-à-vis* the distribution enterprise.

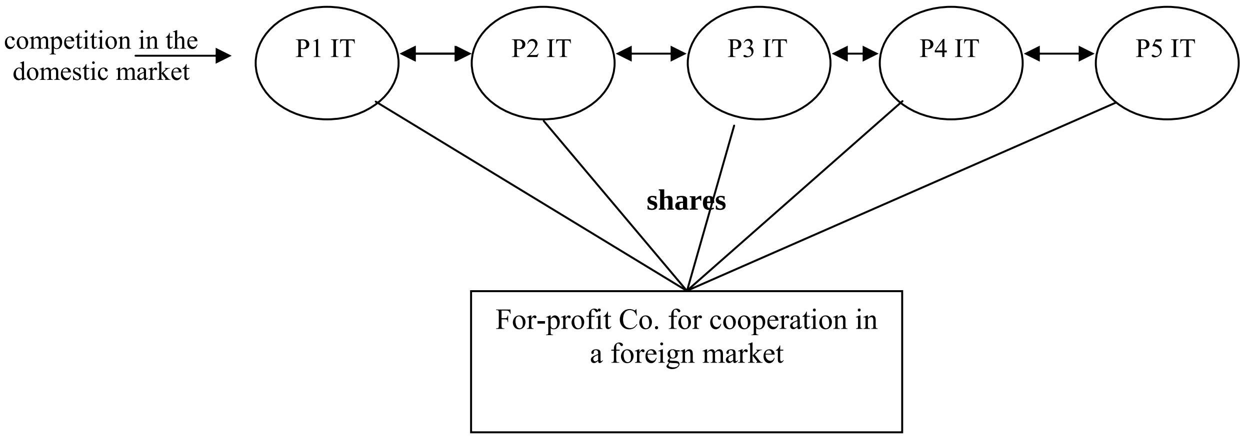
(1) *Horizontal inter-producers networks* which are directed to pursue this goal show a different structure depending on the presence of a leading enterprise, that is prone to establish new access to market or already disposes of commercial channels through which it intends to offer the "network portfolio". As seen below, in this case the network is mainly contractual, although the leader may choose to combine contractual and organisational devices for reasons connected with the interest of involving some specific actors when the network is due to operate in foreign markets (see below). In other cases, in which this leadership does not exist, the horizontal network tend to be organisational. In one case examined, an importer is also involved in the organisational partnership: then, we would have a vertical network which would perform a similar function to that just described.

(2) The example of *vertical distribution networks* which have been observed in the Italian case studies allows an emphasis of the role of new specialised intermediaries. Here, the main aim is the coordination of a number of wine suppliers (often of a small size, lacking internal capabilities to address production strategies through an adequate knowledge of the market). In one case this intermediary function is strictly connected with the coordination of a corner franchising system.

(3) On the *side of "final distributors"* (large distribution chains and Ho.re.ca. business), the main scope of *horizontal networks* is the **reduction of a different type of fragmentation: that arising at the last stage of distribution with regards to retailers**. The observed networks mostly tend to improve the efficiency of the distribution chain, by centralising (part of) the negotiations with suppliers and provision of standardised services (mainly logistics, storing and advertising). The overall effect is quite different in case of purchase platforms of large distribution chains or Ho.re.ca. networks. Indeed, in the former case (more than the latter), the use of networks contributes to the enhancement of the power of distributors vis-a-vis wine suppliers, reducing their ability to access these distributive channels, and exposing to larger contributions those that do access.

(3.1) While these networks mainly operate at national level and are not generally specialised in wine distribution, a different group of horizontal networks has been found in the international context (see below): here the main objective is **to coordinate intermediary enterprises** (including, but not necessarily, importers) **which operate in different supply markets**, turning their wine portfolios into a coordinated offer due to be distributed in a target market.

Fig. 3 - Example of horizontal network of producers in distribution



4.2. Local, national and international networks in distribution

The Italian case studies show that, though generally more limited, distribution networks tend to develop at international level more than the case production networks.

Table n. 6 - Local, national, international dimension of distribution networks in the Italian case studies

	Local	National	International (EU)	International (world)
Horizontal networks (producers)		X	X	X
Vertical networks		X	X	X
Horizontal networks (Ho.re.ca.)	X	X		
Horizontal networks (LSD)	X	X		
Horizontal networks (LSD, importers, other intermediaries)				X

The table shows that, among the distributive networks, the less "internationalised" ones are horizontal networks established as purchase platforms for large distribution chains or Ho.re.ca. business. Here, as a practice that is internationally recognised, negotiation is mainly organised at national level, with possible forms of local sub-negotiation. The fragmentation of legal systems affecting this negotiation probably discourages further centralisation at European and global levels also for those chains that operate worldwide.

The use of horizontal networks among final producers to access European or extra-European markets should be highlighted. Only a few cases support this example, and in all hypotheses a distribution enterprise is established abroad (on the initiative of all the producers' or one of them) in order to create and distribute a comprehensive portfolio of Italian wines. Of course, the non-domestic nature of the target market and the usual different origin of producers as to Italian regions do not totally neutralise competition among participants. Then, the network governance plays a pivotal role, sometime betraying its weaknesses. No case of similar networks, in which producers coming from different European countries participate, has been identified.

4.3. Network structure and legal forms

The following table shows the legal forms of distribution networks observed within the Italian case studies.

Table n. 7 - Legal forms of distribution networks in the Italian case studies

	Local	*National*	*International (EU)*	*International (world)*
Horizontal networks (producers)		Contractual	For-profit company	Mixed
Vertical networks		Contractual (bilateral linked contracts)	Contractual (bilateral linked contracts)	Organisational (for profit company)
Horizontal networks (Ho.re.ca.)	Organisational (consortia)	Organisational (consortia)		
Horizontal networks (LSD)	Organisational (cooperative or for-profit company) or contractual (multilateral contracts)	Organisational (cooperative or for-profit company) or contractual (multilateral contracts)		
Horizontal networks (LSD, importers, other intermediaries)				Contractual (bilateral linked contracts). Organisational (for profit company)

Since the observed cases do not number many, it is not possible to infer general conclusions from this table. However, some interpretative hypotheses can be made.

As it is often the case, vertical networks are mainly contractual and established through the mere link between bilateral contracts (distribution contracts between final producers and distribution enterprise). This allows high flexibility in coordinating the network on the basis of a clear (though *de facto*) leadership as recognized by the distribution enterprise. For similar reasons, it could be observed that horizontal networks are contractual when the access to a given market is ensured thanks to the position of one of the final producers, leading the network; while, where a clear leadership is not recognized, then the horizontal network seems to prefer the organizational model.

Finally, the use of corporate devices seems to play an important role if the participants intend to establish a distribution enterprise in a foreign market, eventually combining the involvement of enterprises already based in this target market.

5. Inter-Firm Networks and Service Supply

The comparative research has distinguished between three types of service supply: a *public supply* (in which services are provided by public entities), an "*associative" supply* (in which services are provided by entrepreneurial associations, consortia etc.) and a *market supply* (in which services are provided by professional or service companies) (see chapter VI).

The three Italian case studies show that in the areas examined, public service supply is limited with the exception of a prominent research centre, providing innovation-related services to agricultural enterprises in Trentino, which was recently privatised and converted into a private-public partnership (in the form of a foundation).

Except for this, service supply is mainly "associative", this being services provided by producers and inter-branch associations. Again in Trentino, the role of the cooperatives' federation should be highlighted under this profile.

Questionnaire data show that the "associative" supply is particularly relevant for grape-growers, whose lack of financial resources and managerial skills leads them to rely on consortia and associations, taking advantage of lower fees, as compared to those found on the market, and a higher sensitiveness and familiarity as regards common needs which are typical of that class of producers. In this context the supplied services are mainly standardised.

Table n. 8 - Italian case studies – Main providers of services according to the answers of grape growers –

	Trento	Verona	Catania - Ragusa
Innovation-related services	0(2) 4(2)	6(3)	6(2)
Technical support (in production)	4(2)	6(5)	6(2)
Technical assistance for legal compliance procedures	9(2)	6(4)	6(2)
Services for internationalization	0(5)	0(4) 6(1)	6(2)
Respondents	***5***	***5***	***2***

Note - *Numbers outwith brackets should be interpreted as follows: 0. The firm does not purchase nor produce any service. 1. The firm itself. 2. Professionals. 3. Public entities. 4. Private and public entities (mixed). 5. Private service companies. 6. Network organisation of which your enterprise is part (e.g. cooperatives, consortia, etc.). 7. Entrepreneurial associations (industrial, agricultural, etc.). 8. Banks or financial institutions. 9. Others.*
Numbers between brackets show the number of enterprises selecting the mentioned answer.

Final producers tend to rely on the "associative" type of offer to a lower extent. They are likely to make investments in order to produce internally at least a minimum threshold of services (particularly technical services, innovation related services or services affecting the building of their business strategy, e.g. for internationalisation) in order to avoid their dependence upon the market. From their perspective the supply provided by associations and consortia is perceived as not sufficiently tailored on their needs, although relevant at a more general and standardised level.

Table 9- Italian case studies – main providers of services according to the answers of final producers

	Trento	Verona	Catania - Ragusa
Innovation related services	0 (5) 1 (8)	0 (1) 1 (11)	1 (16)
Technical support (in production)	0 (5) 1 (8)	0 (1) 1 (10)	2(16)
Technical assistance for legal compliance procedures	0(7) 1(5)	0(2) 2(8)	2(14)
Services for internationalization	0(4) 1(8)	0(7) 1(6)	0(1) 1(19)
Respondents	***24***	***21***	***28***

Note *- Numbers outwith brackets should be interpreted as follows: 0. The firm does not purchase nor produce any service. 1. The firm itself. 2. Professionals. 3. Public entities. 4. Private and public entities (mixed). 5. Private service companies. 6. Network organisation of which your enterprise is part (e.g. cooperatives, consortia, etc.). 7. Entrepreneurial associations (industrial, agricultural, etc.). 8. Banks or financial institutions. 9. Others.*
Numbers between brackets show the number of enterprises selecting the mentioned answer.

Openly structured interviews with these enterprises allow the belief that neither market supply nor internal production of services is considered adequate as regards non-standardised services. Also, the role of highly specialised research institutions, where they exist, though recognised at a scientific level, is perceived as not totally prone to transferring innovative knowledge to enterprises.

Limited attempts have been made in the areas examined (specifically, in the province of Verona) to search for a different response to service needs in the wine sector, mainly through the use of **networks**. One corporate consortium has been created and participated in by a few top producers of the area in order to carry on research projects and innovation-related activity. In fact, though involved in some publicly co-financed projects, the network is barely pursuing its original goals, and is mainly focusing on more standardised services (such as in the area of logistics). These difficulties, partially linked with the competitive nature of the relationship among participants, should not discourage the consideration of the advantages of networks as viable and effective instruments for the production of non-standardised services, in particular for R&D activities (see chapter VI).

If examples like these are quite rare in the examined scenario, other types of networks play an important role in providing services to participants. As observed above, first and second-tier cooperatives, final producers or distributors acting as coordinators of vertical contractual networks, and purchase platforms in large distribution chain or Ho.re.ca. channels all complement their main activity with the provision of instrumental services for network participants. Though recognising the important value of this supply, it should be considered whether the formation of networks operating as mere service producers could contribute more to enhancing the competitiveness of the sector.

5.1. Inter-firm networks and promotional services

Like other types of services, promotional services are mainly provided by entrepreneurial organizations and, in some case (Trentino, again) by private-public partnerships. Some of the consortia established for p.d.o. protection are also in charge of promotional activities in the interest of their members.

In the area of promotional services, especially when these are directed to foreign markets, the role of inter-firm collaboration is more widely recognized. Some promotional projects are publicly supported precisely on the basis of the creation of a partnership among interested enterprises (so in Trentino).

The same approach is taken by the Italian government in the implementation of European policy as regards promotion in third countries under the new CMO of wine. As a result, five projects have been financed in the Italian areas examined by this research: three projects proposed by existing consortia or corporate networks, already operating as wine producers; and two proposed by new networks (one consortium and one joint venture[75]), which have been specifically created in order to conduct the promotional projects together with other connected activities (e.g. self-regulation in the area of quality and safety).

No promotional network has been identified among producers based in different European countries, while a relevant example has been examined in the Portuguese case study, as involving an top Italian producer from Tuscany.

Though more present, promotional inter-firm networks still suffer from a high dependence on public subsidies and some difficulties in overcoming the territorial boundaries of p.d.o. production. While territorially based organizations could effectively provide services in this domain, national and transnational inter-firm networks could provide promotional services by focusing on different competitive advantages, eventually developing collective trademarks or other forms of co-branding.

6. Concluding Remarks

The conducting of three case studies in Italy has allowed the identification of some convergence, and many different paths. Despite this, we are aware that the overall picture could not, and in fact does not, reflect the Italian landscape as such.

Regarding the converging evidence, the analysis shows that inter-firm networks still have a limited use, although we in fact found more networks than expected.

Networks emerge along the production chain, particularly in the first part as regards grape-growing and wine-making, and less so at later stages of the production chain. Distributive networks are by far less common. Internationalization is, of course, more limited along the production chain than in distribution; where it is practiced, the formation of networks is still relatively limited.

Unlike in other countries, which have been examined in the European research, networks are rarely used as organizations exclusively targeted to the production of non-standardized services for enterprises operating in the wine sector. However, the production of services, both standardized and non-standardized, represents a key element of many other networks (e.g. grape growers' cooperatives or purchase platforms for large distribution chains) for which the service supply plays a complementary and instrumental role.

The awareness of a limited use of networks does not undermine their strategic role.

Where the network has more clearly shown its potential (for example, the role of cooperatives in north east Italy), it has become a key component of the productive model and it has been able to influence further collaborative dynamics, not only within the cooperative system, but also in the relationships with private producers and sometimes distributors. Where networks are less used (mainly along the distribution chain and at the international level), the identification of (albeit limited) existing examples has allowed the evaluation of the strengths and weaknesses of these models: while the creation of synergies generally constitutes a competitive advantage, the main challenge is mostly represented by the choice of governance structure as a tool for providing adequate incentives for collaboration, discouraging abusive behavior, and allocating power and profits accordingly.

This awareness accounts for the divergences among the observed areas and, firstly, between the north eastern cases and the southern one (again without any attempt to generalize in terms of comparison

[75] See that this legal form has been partially translated into the Italian legal system under the definition of “temporary entrepreneurial association” - a.t.i.

between the north and south of Italy). The lower extent to which networks have been found in east Sicily, if compared with the other two cases, can be interpreted in many ways, starting from the different structure of the productive model, which is much more integrated than that observed in other contexts, and from the inability of the cooperative model to enhance its competitiveness by requesting total conferment and aiming at a more clear process of gradual industrialization. At the same time, the less relevant role of local institutions (either public or private) as providers of services to enhance organizational innovation for enterprises, and then as "incubators" of inter-firm collaboration, should also be highlighted. Indeed, networks are costly, in particular in terms of governance design. Even if not focused on network creation, the role of entrepreneurial and inter-branch associations as well as that of R&D institutions or professional organizations is generally important in creating the opportunities for collaboration, and in some cases in supporting these enterprises in the difficult task of networks' design.

The comparison among the three cases has also permitted a consideration of how networks are influenced by the general structure of the wine value chain. It seems that at least two dynamics may be observed.

First, the more the system includes different productive models (e.g. cooperatives and private producers), the higher the opportunity for mutual learning and the chances of organizational innovation. Second, the more the system focuses on a specific type of inter-firm collaboration (e.g. the cooperative company model), the more this creates path dependence, and the slower and more costly the process of innovation of governance design.

These dynamics could generate different opportunities for Italian enterprises facing the challenges of the global wine market. At national and, even more so, at international levels, organizational innovation, more than path dependence, creates the conditions for a viable use of networks as competitiveness-enhancing devices.

Chapter III
Inter-Firm Networks in the Portuguese Wine Industry: The Case of the Douro Region

by Ana Lourenco[76] and Federica Casarosa[77]

1. Introduction to the National Wine Sector

1.1. Historical overview of the wine sector

Historically, production of wine in Portugal dates back to 2nd century BC, when the Tartessians planted vines in the Sado and Tagus valleys. However, was only in 10th century BC that improvements in grapes varieties and wine-making process occurred as soon as the Phoenicians arrived on the southern coast areas of Portugal. One of the most important partners of Portugal concerning wine trade in England. After the embargo on all French wine import enacted by the English Parliament in 1679, English wine merchants started to heavily rely on Portuguese wines and the request rose four times in 6 years period. However, this trade relationship was not an even one, given the monopolistic position of English wine-merchants towards the Portuguese grape-growers and wine producers that were essentially accepting price and conditions set by English wine merchants. During 18th century, the rise of frauds and adulterations prompted the Portuguese authorities to establish one of the world's first protected designation of origin in order to safeguard the lucrative trade in Port. In 1756, thus, the Marquis of Pombal established boundaries and regulations for the production of authentic Port from the Douro. The regulation entailed the creation of the Douro Wine Company to monitor all stage of Port wine production from harvesting to final shipping, including wine-making and aging.

In early 20th century another change in regulation did influence the economic organisation of Portuguese wine industry, as in 1937 was founded the so-called *Junta Nacional do Vinhos* which main effort was to encourage the consolidation of small vineyard landowners into cooperatives forms of wine producers. As co-operatives rose to nearly absolute power in several wine regions, the wine-making and hygiene standards of some of the more lax co-operatives declined which cast a pale reputation on the whole of the Portuguese wine industry.

Fifty years later, as Portugal accessed to EU, the aforementioned regulation were overturn, as they were unfairly benefiting only cooperatives enterprises. Instead, smaller growers and wine producers received subsidies and grants from the EU to improve their vineyards and wine-making facilities. This was also the trigger for a renewed perception of Portuguese wine, which was no more know as synonym of Port wine. While historically the Portuguese wine industry was seemingly split into two: the producers who made Port and those who made everything else, the distinction between the two sides of the industry is now blurred. Many Port producers are now making premium dry wines from grapes grown in the Douro and producers in other areas of Portugal have been experimenting with making fortified wine in the style of Port. In the last five-six years there has been a major phenomenon of mergers and acquisitions with growing concentration of the industry, strengthening the Portuguese control over national production, where the previous trend acknowledged a wider intervention of European enterprises. On the one hand, this trend has lead, in the Port wine production, to a concentration of the market power in the hands of only five companies; on the other hand, this has triggered the re-constitution of smaller enterprises which cover niches of markets by those owners

---

76 Universidade Catolica Portuguesa, Faculdade de Economia e Gestão (alourenco@porto.ucp.pt)

77 European University Institute (federica.casarosa@eui.ue).

which were bought by the big ones, usually preferring to focus on the whole process of wine production, from grapegrowing to bottling, under a denomination of origin (DO) .

1. 2. Portuguese wine market

Portugal has 11 viticultural regions (from north to south): *Minho*, *Trás-os-Montes*, *Douro*, *Beiras*, *Tejo*, *Lisboa*, *Península de Setúbal*, *Alentejo*, *Algarve*, *Madeira* and *Açores*. The total area devoted to viticulture in Portugal is 237.5 thousand hectares.[78] Given that the surface area of Europe's vineyards has slightly decreased between 2005 and 2008 (by 0.98%), whereas it has slightly increased in Portugal (by 0.9%),[79] the latter represents now 5.4% of the total surface area of vineyards in Europe.

The wine sector is highly important in the national agricultural sector as it represents 14% of the total agricultural production. However, the production system is still highly fragmented, but it strongly related to the geographical area, where the grapes and wine production is located. The statistics from the national Grapes and Wine Institute (hereinafter IVV) show that in 2009 the number of economic agents active in the sector counts no less than 13.000 enterprises. The geographical distribution is uneven and more concentrated in the northern areas of Portugal, namely *Minho*, *Beiras* and *Douro*, where also the most part of the wine is produced, in terms of quantity.

The production of grapes in Portugal in 2009 amounted to over 5 million hl, with a small decrease over last year but in a general descending trend form 2006 on.[80] Geographically, the decline in the production of wine involved, with few exceptions, the same areas that showed a reduction in the production of grapes.

Table 1 – National wine production per area per quality (unit mhl)

Region	2000/2001			2005/2006			2008/2009			2009/2010		
	DO	**IG**	**Table**	**DO**	**IG**	**Table**	**DO**	**IG**	**Table**	**DO**	**IG**	**Table**
Minho	865	15	1	905	27	8	756	25	3	844	19	4
Tra-os-Montes	4	45	205	15	21	220	8	26	70	10	31	70
Douro	1359	42	57	1383	105	256	1234	36	109	1166	27	136
Beiras	536	339	326	472	247	635	318	148	271	358	122	308
Tejo	43	171	529	69	187	429	69	124	325	56	105	385
Lisboa	60	372	872	65	311	801	61	335	537	55	322	583
Peninsula Setubal	87	158	83	95	162	81	89	169	79	108	177	92
Alentejo	233	195	5	344	346	4	389	420	3	355	446	4
Algarve	7	1	5	12	9	7	5	13	6	4	11	7
Madeira	62	0	0	36	0	7	47	0	3	40	0	5
Açores	1	0	21	1	1	7	1	2	7	3	3	8
Total	**3260**	**1342**	**2108**	**3395**	**1416**	**2455**	**2977**	**1297**	**1415**	**3000**	**1265**	**1603**
% over total annual production	*48%*	*20%*	*31%*	46%	19%	34%	*52%*	*22%*	*25%*	51%	22%	27%

Source: IVV 2009

78 IVV, Vinhos e Aguardentes de Portugal, Anuario 08, 2008, p. 48.

79 See provisional data from OIV 2009.

80 INE, 2009.

Table 1 shows data on the production of wine for quality label in the last ten years. Different trends are acknowledged in the different quality types. Within the general reduction of total production, contraction is more marked for table wines, while IG wines, and especially the DO wines show an increase in the percentage of production, though not in absolute value.

The data confirms that the gradual increase in the quality of wine produced at national level. This is also supported by the data available in terms of type of producers of different quality of wines. In particular, associated enterprises, including in this category both companies, cooperatives and consortia, do reduce their total percentage of wine production in favour of not associated enterprises, i.e. sole proprietorships. Most notably, while table wine production by associated enterprises reduced in the last 10 years of only 5%, IG and DO production reduced of almost 10%, though in absolute value the quantity produced is half of the initial one. On the contrary, not associated enterprises show a corresponding increase in terms of production of table wine, but looking at absolute value the quantity is less the initial one; while DO and IG wines have increased in percentage but with opposed results in terms of absolute values

2. Douro Viticultural Region

The focus area for the case study is the Douro viticultural region - *Região Demarcada do Douro* (RDD). In order to understand the structure of the production and distribution chain, two elements should be clarified: the structure of property, and the specific DOC regulation within the RDD.

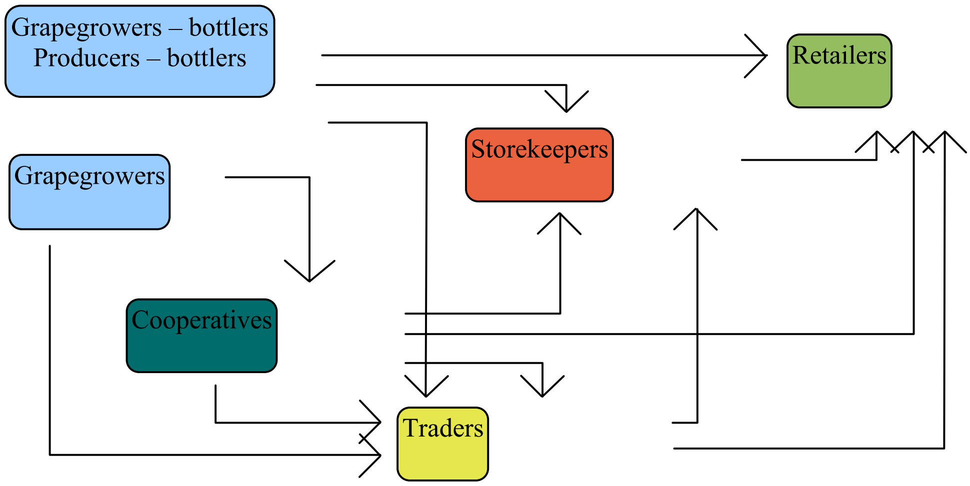
Historically, the RDD was created in 1756, making it the oldest specified region in the world. It is divided into three sub-regions: Baixo Corgo, Cima Corgo and Douro Superior, each with its own demarcated area. The sub-region of Cima Corgo is the heartland of Port, whereas only a small portion of Douro Superior is used for viticulture. Although the RDD produces the highest quantity of wine at the national level (see above), the surface area of land available for grape-growing is quite limited and highly fragmented. In fact the RDD has a total of 45,726 ha of surface for grape growing,[81] within an average size of land per enterprise of 1.17 ha.

There are two DOC in the RDD region: Port DOC and Douro DOC. The former includes a wide range of internal varieties based on the production process, and on age maturation. The latter also includes different types of wine, such as still wine, sparkling wine, liquorish wine (Moscatel) and brandy. An additional appellation is the Duriense one, which falls into the Indication of Origin (IG) category. The current proportions in the level of production are strongly polarized towards the higher quality wines: Port production represent 65% of the total volume of wine production in the RDD, while Douro wine accounted for 28%, and Duriense for 2%. In recent times, however, increasing importance has been gained by the Douro DOC, slowly phasing out the table wine percentage.

The wine production in the RDD is subject to a long and complex process, that can be divided, roughly, in three phases: viticulture (grape production and collection); wine-making (transformation of the grapes into wine); and maturing/aging (aging of the wine in special containers). This process is concluded with a fourth phase, which is the marketing and trading of the wine.

[81] IVDP 2008

Figure 1 – Production chain



Source: Quaternaire Portugal/UCP

Initially, wine-growers would be in charge of the three phases of the wine production process (viticulture, wine-making and maturing), however that has changed, as a result of the emergence of new actors in the market, as well as of vertical and horizontal integration processes.

When created, in the 50s and 60s, cooperatives acted mainly as intermediaries between wine growers and traders, concentrating their activity in the wine making and storing phases of the production and selling the wine to the traders. Today, however, cooperatives sell directly the wine on the market, without the intervention of traders, selling bottled, brick and bulk wine. However, they still sell bulk Port wine to private producers to be bottled or to be packaged in private label.

Traders were subject to successive concentrations processes that led to the creation of four major players in the Douro wine market: Symington, Sogrape, Quinta&Vineyard Bottlers (of The Fladgate Partnership group), and Sogevinus.

Producers in the RDD are almost exclusively individuals or companies (excluding cooperatives). The companies have only 2% of the agricultural establishments corresponding to 8% of the area, the rest pertaining to individual producers.

As mentioned above, most wine growers envisage their agriculture activity as complementary to their main economical activity. In fact, only 9% of individual producers live exclusively from the income arising from the agricultural exploitation of their land. This is essentially the result of two combined factors: (i) the considerably small size of the land and (ii) the short degree of vertical integration. These two factors also render difficult the economical viability of theses agricultural exploitations.

Currently there are approximately 280 entities operating in this sector, from which 81 operate in the Port wine sub-sector and 269 in the Douro wine sub sector. An important part of the entities operating in the RDD wine industry operate simultaneously in the Port and Douro sub-sectors; there are in fact only 9 (from 81) entities exclusively dedicated to Port wine. From the 269 operating in the Douro sub-sector, 198 are exclusively dedicated to Douro wine; 63 operate in both sub-sectors.

In the Port sub-sector there is a phenomenon of horizontal (in respect to the trading) and vertical (in respect of the grape growing) integration that has led to the arising of large company groups, formed by traditional actors of the sector or new ones, in particular foreign companies. Whereas in the Douro sub-sector, there is a growth of new entities created from existing entities that operated essentially at the level of grape growing. There is also an incursion of Port producers in this sector, as well of foreign companies.

Among the 81 entities operating in the Port wine sub-sector, 31 are traders, and 50 are producers and bottlers. This dominance of traders is a result of the concentration phenomenon that occurred since the 90s and led to the creation of important company groups. Narrowing the option to sell grapes, this concentration phenomenon increased the dependence of grape growers from traders, undermining growers' negotiation power. As a result of the concentration, in 2006 the 4 major groups/ companies have a 67,4% share of the sales of wine and the eight biggest, 84,1%[82].

Simultaneously, there was also a phenomenon of vertical integration consisting in the purchase by traders of large estates to grow grapes in the RDD. Nevertheless, the degree of vertical integration in this sub sector is quite low: the 4 most important groups only have 1.168 acres of vineyard in the RDD, which is responsible for only 9% of their own production.

From the 269 entities operating in the Douro wine sub-sector, 42 are traders, 68 are producers-bottlers, 128 are grape growers/wine producers/bottlers and 31 are storekeepers. Similarly to the Port sub-sector, in the Douro entrepreneurs also dominate the market, but in a less significant form: cooperatives have, in value, a 30% share of the market.

In comparison with the Port sub-sector, the concentration degree in the Douro sub-sector is much lower: the four most important companies have a 48,6% share of the sales, the eight most important 61,6% (against a 67,4 and 84,1% in the Port sector).

As shown above, the two sub-sectors are not hermetically sealed one from the other, as entities often operate in both sectors. Usually, the companies that have a leading position in the Port sub-sector, also have an important position in the Douro sub-sector.

2.1. Regulatory framework for the wine production

DOC wines from the RDD are intensively regulated from grape growing to wine making, maturing, bottling, labeling, packaging, storing and trading, so as to safeguard their quality and reputation.[83] There is regulation that is specific to the RDD, such as the *Benefício* system and the *Lei do Terço,* applicable only to Port wine production.

As a result of the surplus of the offer of Port wine, that the market couldn't absorb, a system to limit the production of Port wine was created in 1932 together with the creation of Casa do Douro: the benefício system. It is a unique system, that doesn't exist in any other region of Portugal.

Each year, before the harvest, the global volume of grape must that can be transformed in Port wine is defined, depending on the existing stock of wine as well as the trade expectations for the following year. Then, according to the location, the nature of the soil, the varieties and age of the vines (criteria that should allow the selection of the grapes of better quality84), the Casa do Douro apportioned licences amongst all the registered farmers to produce a set amount of fortified wine, according to their classification (from A, the best, to F) for a set price. This is the benefício system.

This system was created as an instrument to control the quantity of wine that entered the market and simultaneously its quality. However a social concern was also in the basis of the creation of this

---

[82] In 1997, the quotas were of 49 and 73%, respectively.

[83] Note that Douro wines, until 10 years, ago had a reputation of low quality wines.

[84] The first distribution rules were defined in the *Portaria* n. 8 198, of August 12 of 1935. In 1947, a more complex set of rules, the *método da pontuação* (scoring method, based on 12 criteria) defined by Engº Álvaro Moreira da Fonseca, was defined (also known as "Método Fonseca"). This method was subject to different modifications, the method in force is defined in the *Portaria* n. 413/2001, of April 18. However, it must be pointed out that the IVDP is considering a change in this method.

system, conceived also as a means to guarantee access to the benefício to small grape growers. In fact, the system was created not solely with a concern to protect and guarantee the quality of the wine – that would have led to the granting of benefício only to the best quality vineyards – but also to guarantee that other grape growers have access to it. It is the result of a commitment between quality and social concerns. The benefício system was conceived as an instrument of control of the quality of the wine, but, above all, is a guarantee of equilibrium of the market.

Today, the distribution of the benefício is performed by the IVDP, the specific power of allocation of the benefício pertaining to the Interprofessional Council.

The benefício system is a source of conflict between grape growers that own vineyards of the best classes (A and B) - and who argue that they should be granted a 100% benefício – and grape growers that own vineyards with poorer classifications that don't want to loose their right to the benefício. One critique that is often made to the system is that it maintains artificially certain producers in the market. These small producers, that have a small benefício, often profit from this system by selling (illegally) their licence to produce Port to other producers. Please note that the sale of the licence is not always followed by a delivery of benefit grapes, which allows grapes, that did not benefit of the benefício system, but are also of very high quality, to enter the market. This illegal trade of benefício does not therefore penalize the ultimate purpose of the system, considering that it might in fact raise the quality of the grapes introduced in the market.

Despite all the critiques addressed to the system, any changes or the suppression of the system - that are presently being considered and discussed, in particular by the IVDP - are seen by all of the actors with caution, as no one knows their consequences. The role of beneficio is both cartelization and distributional. The growth of the production of Douro wines has also to be taken into account in the revision of the benefício system.

The Lei do Terço85, that limits the sales of Port wine traders to 1/3 of the wine that they have with more than one year, was created with the purpose of allowing/encouraging the maturing/aging of wines86. Simultaneously, by forcing traders to keep stocks of Port wine, this law guarantees the quality of the wine and protects the market. Please note that in addition to this obligation set by the lei do terço Port wine traders are also forced by law to maintain a permanent stock of 150 000 l. of Port wine. This law forces traders to invest in the stocks and storage of wine.

2.2. Institutional actors in the RDD

In 1995 there was a profound reorganization of the Port wine sector in order to implement an inter-professional model. Different entities operated in this model, in particular, *Casa do Douro* and the Association of Port Wine Companies,[87] which together formed the Inter-professional Commission for the Demarcated Region of the Douro (CIRDD).

The CIRDD was created with the purpose of ensuring an equal participation of both producers and traders in the decision making process regarding the Port wine sector. This change of the system translated itself mainly in a re-allocation of the institutional power between wine traders and wine producers, beneficing traders, who were, in the previous model, undermined by producers. In fact, before 1995, traders only had a role, in this process, as consultants of the Port Wine Institute (*Instituto do Vinho do Porto*, hereinafter, IVP). With the new system traders and producers shared the regulation of the wine production.

[85] This law was created in 1959 (Decree-Law 42 604, of October 21 of 1959), however since 1932 there have been limitations to the volume of sales of Port wine.

[86] This law is currently defined in article 35 of Decree-Law 173/2009, of August 3rd, which regulates the Port and Douro designations of origin.

[87] See below the descriptions of these associations and their powers.

Please note, that although the CIRDD was conceived as a representative entity of the agents operating in the wine sector, because it was a public institute, it was subject to Governments' supervision.

In this framework, the State acted as a supervisor, operating through a public institute, the IVP. The IVP was, in fact, the entity responsible for the supervision of the trading activity and the certification of Port wine.

In 2003, in the context of a general effort to decrease the State's administration, there was a decision to reduce the number of public entities operating in the Port wine sector. This decision was also the result of the functional breakdown of the complex model of 1995 that involved an unwieldy coalition of the duties and responsibilities of the Casa do Douro, the CIRDD and the IVP. Experience showed that there was a need to reduce the number of public entities responsible for regulating the wine-making sector in the Douro region and to clearly distinguish each entity's field of action.

In light of the above, it was decided that a single public entity should manage the Port and Douro designations of origin. As a result, the CIRDD and the IVP where merged in a single entity, the *Instituto dos Vinhos do Douro e do Porto* (public institute) and a new role was given to Casa do Douro.

The Instituto dos Vinhos do Douro e do Porto

The *Instituto dos Vinhos do Douro e do Porto* (hereafter IVDP) is a public institute responsible for the supervision of the wine sector in the RDD. The regulation and certification of the Douro and Port wines is in fact ensured by a sole entity. This is an element of particular relevance in the present context of increasing complementary between the Douro and Port wine sectors.

The mission of the IVDP is to promote the control of quality and quantity of Port wine, via the regulation of the production process, and to protect the Douro and Port designations of origin (*denominação de origem*) and the Duriense geographical indication.

Its scope of powers, as defined by law, is the following:

a) recommend the strategic guidelines and execute the viticultural and winemaking policies for the Douro Region;
b) promote the convergence of interests of production and trade in defence of the general interests of the Region;
c) control, promote and defend the Douro and Port Region's designations of origin and geographical indications, as well as control the remaining wines and wine products that are produced, made-up or transit through the Region, without prejudice to the prerogatives and duties of the IVV;
d) discipline, control and supervise the production and trade of wines produced in the Douro Region, promote and guarantee their quality, and sanction all infractions of the rules and regulations governing wines and wine products from that Region, without prejudice to the prerogatives and duties of the IVV;
e) promote and administer all aids for guiding, regulating and organising the Douro and Port wine markets, when, under law, expressly authorised to do so by the Ministries of Finance and of Agriculture, Rural Development and Fisheries;
f) encourage the adoption of the best viticultural, winemaking and technological development practices; and
g) assume all other duties and responsibilities for the Douro Region viticultural and winemaking sector that the Government may attribute it.

The monitoring of the activity in the Douro and Port wine sector is performed by the IVDP with resort to different instruments, amongst which the creation of different communication/information obligations; a database indicating which land is capable of producing Port and Douro wine, the existing wine storage and bottling facilities, the capacity of producers and the circulation of wine; the organization of a registry of entities that trade Port and Douro wine and the verification upon the act of the obligatory registration that such entities comply with the legislation in force; the certification of the designations of origin[88]; the right to prohibit the trade of wine when a relevant violation of the applicable legislation is detected; and the right to perform inspections to sellers, storage facilities and wine producers and traders' offices, at any given moment.

The Inter-professional Council

Although the State, via IVDP, continues to be responsible for certifying the wines from the Douro Region and for supervising the sector - control and sanctioning - the professions, represented in the Inter-professional Council of the IVDP, are charged with the managing and the coordination of the viticulture and the winemaking in the RDD[89].

The inter-professional council, which represents producers and traders, is divided into two specialized sections that correspond to the designations of origin it manages: one for Douro and the other for Port.

Having in mind that the IVDP is on the one hand a public institute by means of which the State controls the Douro and Port wine sector, and, on the other hand, an institution that represents traders and producers, it is possible to say that is merges public and private interests.

The managing of these two types of interests is reflected in the organizational structure of the IVDP: on the one side, the President of the IVDP, more close to the Public Administration and, on the other side, the inter-professional council that represents private interests – producers and traders.

The allocation of power between these two organs shows us that the President is more oriented to the supervision, monitoring and sanctioning activities and that the Inter-professional Council is more oriented to the managing of the different interests co-existing in the sector, the issuing of statements and opinions in respect of policies adopted or proposed for the RDD and the approval of the strategic plans for each designation of origin.

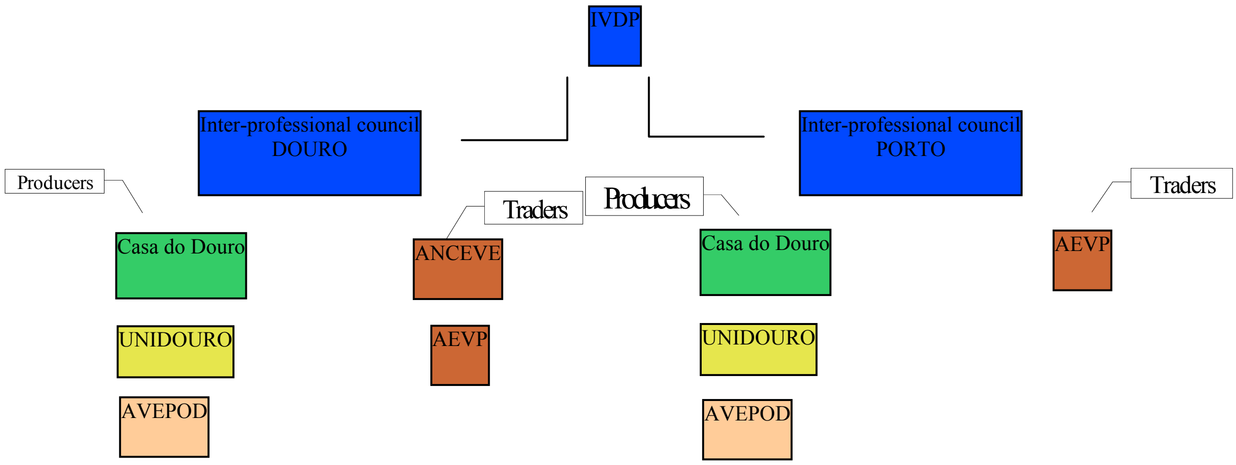
The IVDP council is composed by production and trade representatives. The 20 production and trade representatives that are a part of the inter-professional council are appointed by the Minister of Agriculture, following indication of the IVDP.

---

88 The certification of designation of origin, carried out by the IVDP, is a part of the structure of control, promotion and protection of the designation of origin.

89 The Council is, amongst others responsible, for the regulation of the A.O.C. of Douro and Port.

Figure 2 - Composition of the inter-professional councils within the IVDP



Casa do Douro

Casa do Douro is a public association, whose role is essentially to represent wine producers – who are under the obligation to register by Casa do Douro - and to support the production of wine. In particular, Casa do Douro is responsible for: keeping a registry of all wine producers and vineyards; indicating the producers' representatives for the interprofessional council of the IVDP; supporting the wine production and providing technical assistance to producers; collaborating with the IVDP in the execution of Government rules regarding wine trade, in the context of the creation of an European wine market; representing and defending the interests of wine producers of the RDD; and cooperating in the protection of the designation of origin.

The other associations participating to the inter-professional council

The *Associação das Empresas de Vinho do Porto* in the Association of Port wine producers or AEVP, a private institution not for profit constituted in 1975. The main objective at that time was the representation of the Port traders in the IVP, then in 1988 it opened up also to producers of Port and Douro. The AEVP has been the main instrument for representing and coordinating the activities of its members and, at the same time, has encouraged its role as an in-house forum of discussion and approximation of positions. It is composed by 18 trader enterprises that commercialise 90% of Port volume and 30% of Douro volume (50% of its value).[90]

The *Associação de Viticultores Engarrafadores dos Vinhos do Porto e Douro* or AVEPOD dates back to 1986 and has as objectives the protection of the interests of Porto and Douro producers and bottlers in institutional forums, and the diffusion at national and international level of members wines (Vinhos de Quinta or Vinhos do Produtor).

The Association represent and defend the interests of wine producers and bottlers; contribute with all available means towards the economic and technical development of its members; foster economic activities of interest to its members promote their wines; encourage its members to participate in wine tastings, fairs and other promotional and commercial events; join or establish contacts with other similar bodies

---

[90] AVEP, 2009.

The ANCEVE is the *Associação Nacional dos Comerciantes Exportadores de Vinhos e Bebidas Espirituosas*, founded in 1975 and composed by more that 150 main economic agents in the wine sector, not only traders and exporters, but also Cooperatives and Producers-Bottlers.

The aim of the Association is to defend the legitimate rights and interests of its members, in close cooperation with associations from other related sectors, with a view to equipping the country with the means necessary for its technical and social-economic development.

Unidouro is a cooperative union, the *União das Adegas Cooperativas da Região Demarcada do Douro*. The main objective of the Unidouro, regardless of the techniques and means it uses, is to be active in the wine sector and to carry out or implement actions and services for cooperative wineries.The Unidouro coordinates the actions of its members before public entities and credit, social security, labour relations, insurance and similar institutions, always as regards the cooperative sector and at the corresponding regional level. It also organizes services and actions of interest to its members, thus making best use of the respective cooperative action measures. It can also be the arbitration forum in case of disputes among its members.

3. Contractual Relations in Production and Distribution

Wine production, in general, is characterised by land fragmentation and dispersed ownership. This, on the one hand, can be interpreted as an asset as diversification of products can be easily achieved, enhancing competition among producers; however, in the current economic crisis, these characteristics can become a flaw as enterprises cannot compete with new (usually foreign) competitors that already provide for a widened proposal of offers.

In this framework, cooperation among enterprises is more than an auspicable step, is a veritable need either in order to organise strategies that focus on trademarks or on increased quantity of production. Different options are available to enterprises that are thinking to re-organise their production chain, namely:

1. Vertical integration, i.e. the complete control over the production phases that are carried out in-house in the enterprise;
2. market relationships, or spot contracts, e.g. contractual relationships concerning the purchase of raw materials (grapes or bulk wine) without specific investments in the relationship;
3. organisation, and in particular cooperative organisations which provide for collective use of machines and equipment, and further sale of collective production;
4. networks creation.

These are not alternative choices, instead they can be complementary one to the other depending on the object of the relationship or on the type of ownership model used. The evidence below will provide the relevant examples that has been found in the case study.

3.1. Production models: evidence and data analysis

The enterprises analysed for the case study can be classified under different headings: family and non-family enterprises, and cooperative and non cooperative organisations. As in the other European case studies, the number of family enterprises is the prevalent, but this is also related to the specificities of the sector which is still mainly based on family relationships.

Table 2. Number of firms interviewed in three cases according to governance asset

	Type of ent	Interviewed as buyer	Interviewed as seller	As both	Total
RDD	Coop.	0	0	4	**4**
	Fam.	15	2	0	**17**
	Non Fam.	2	0	1	**3**

In the case study, there are only few enterprises that are vertically integrated, and this is clearly related to the fragmentation of land problem. The amount of production by the enterprises alone, usually do not achieve a quantity of wine that is sufficient to access the market. The table below provide evidence about this need to integrate the production through purchase of grapes/bulk wine[91]. These data can be used as a proxy to verify whether the contractual relationships among enterprises can move from market relationships to networks relationships.

Table 3 – Percentage of enterprises the buys or sells grapes or bulk wine from third parties (each can adopt more than one strategy) – percentage on the total of interviewed enterprises

Enterprise buys grapes for vinification	71%
Enterprise buys bulk wine to integrate my production	29%
Enterprise buys bulk wine to be bottled and sold on the market	0%
Enterprise sells grapes for vinification	13%
Enterprise sells bulk wine to integrate buyer's production	33%
Enterprise sells bulk wine to be bottled and sold on the market	42%

Given the strong importance of the DO production the RDD,[92] we can infer from the data that the majority of contractual relationships focus on purchase from neighbouring enterprises. However, *different strategies show up whether we look at bigger enterprises or to small and medium enterprises producing wines beyond the Douro region.*

On the one hand, bigger companies prefer to integrate vertically and/or buy lands in other regions – or even abroad – and produce directly. For instance, one of the biggest wine producers widened the products portfolio, buying lands in other regions of Portugal (in Dão region and in Alentejo) and subsequently abroad (Argentina). The objectives of such moves, usually, are related to an improvement in the quality of wine portfolio, based on recognisable brands. As a matter of fact, big enterprises are more based on the brands they produce instead of DO production.

On the other hand, small and medium enterprises have more region-related products, which usually do not include Port wines, as smaller producers cannot achieve the level of competition in this market sector. Instead, medium and small enterprises prefer to build up on mixed strategy based both on DO and 'brand' reputation: first, they want to gain the confidence of consumers concerning the average quality level of their products through the DO regulation; then, they try to differentiate upon this level with "vinhos de quinta", that imply better quality wines as they are produced in a single area.

If we differentiate between Port and other DO production we can describe two different pictures. In the former case, a relevant number of mergers and acquisitions occurred ending a concentration of the production enterprises, as the overall market power is now in the hands of only five companies. Looking at the latter case, the enterprises that focus more on other DO wines, the mergers and acquisitions strategy is less adopted. Instead, contractual relationships are more used, and among them

---

91 In the table, we exclude the data from cooperatives that buy only from their members.

92 See above par. 2, Table **.

also network relationships can appear. The distinction between the two is based on the following criteria that has been verify in the interviews, namely

- the length of the contractual relationship, which should last at least for three years (regardless to the fact the contract is yearly renewed or last for the time frame indicated);
- the difficulties in substituting the contractual partner, given the market structure or the quality of the product;
- the co-design of the production methods and/or process, including exchange of information between seller and purchaser, etc.;
- the presence of exclusivity clauses, obliging one or both parties to limit their contractual relationships with other partner;
- the absence of covenants not to compete.

The differentiation between grapes and bulk wine show also that the object of sale/purchase can trigger strategic relationships instead of market one. In particular, grapes purchase is characterised by a high number of sellers, but with a relatively high number of strategic relationships. Whereas, bulk wine supply is less important, in term of quantity of both total and strategic relationships. Thus, we can infer that the offer of bulk wine is more concentrated that the one of grapes

Table 4 - Average number of buyers / sellers per firm in purchasing / selling of grapes / bulk wine

	Grapes	**Bulk wine**
Average number of sellers	468	15
Average number of strategic sellers	286	3,5
Average number of buyers	3	0
Average number of strategic buyers	0	0

Looking at the specificities of such strategic relationships given the above-mentioned criteria, we can underline that, though the irreplaceability of the partners is almost never perceived by the parties, the presence of strategic partners is quite high in the case of grapes purchase/sales, due to the relevance of exclusivity clauses within the relationship, while the importance of the joint decisions is as important in the case of bulk wine sale/purchase.

Table 5 – Percentage of strategic relationships in purchase/sale of grapes/bulk wine

Channel	**Grapes**	**Wine**
Percentage of irreplaceable partners	**5%**	**17%**
Percentage of cases with a joint decision about wine	**12%**	**42%**
Percentage of exclusive deal arrangement (binding for the seller)	**90%**	**37%**
Percentages of strategic relationships	**97%**	**41%**
N. Respondents	***6***	***3***

In the case of the *supply of grapes*, sale contracts are usually oral; however, when a written contract is used, it is quite detailed, taking into account the quality of grapes. The relationship between the buyer and the grape seller is, in general, long term, though contracts are renewed each year, and exclusivity is not imposed on the grape seller who, in general, is easily substitutable. The *supply of bulk wine* in the RDD is relevant, mainly regarding Port. Sales contracts are mainly written, though not detailed (except for high quality), and are long term in practice though formally renewed each year. In general there are no exclusivity clauses, and bulk wine suppliers are considered as easily substitutable. Again we should draw a distinction between Port and other wines, as for the former, given the *beneficio* system, sale is strongly regulated in terms of quantity available on the market and minimum price, thus written contracts are more common[93].

The evidence shows that, when dealing with medium-low quality grapes and bulk wine, contractual relationships in production may be characterized as being closer to market-type than to strategic relations: although there is a long term aspect to the relationship, sale contracts are annual, with no exclusivity clauses, and involving a party – the supplier – that is understood as being easily substitutable. However, when dealing with medium-high quality grapes and an increasing quantity of bulk wine, contractual relationships move to strategic relations, where exclusivity can be imposed and stability is achieved through annual renewal of contracts. In these cases, the buyer's monitoring activity is higher, with the inclusion of penalties or the possibility of refusing grapes where the quality required is not achieved. Yet in these cases the relationship remains hierarchical, as it is the buyer which defines the characteristics of the product, with the seller only complying with them.

3.2. Distribution models: evidence and data analysis

The data available form the questionnaires, provide the perspective of both final producers and distributors sides of the contract. This allows to clarify, on the one hand, the perception of the final producers with the regards to the increasing power of distributors and, among them, of Large distribution chains; and, on the other hand, the strategic choices of distributors in terms of access to local and international markets.

The data available shows that from point of view of the final producers the possibility to reach the final consumers is mainly based on the intermediation of retailers and distributors both in national and international markets, with a higher relevance of direct sale where the counterpart is a large chain distributor. In the international distribution, an important role is played by importers who become the reference points in order to gain access in foreign markets, not only where such condition is imposed by legal obligations (e.g. U.S. market).

Table 6 – Type of distribution for bottled wine

Direct distribution	6.4%
Indirect distribution	93.6%
Respondents (final producers)	23/24

Table 7 – Channels of distribution for bottled wine

Channel	National	Internat.
Network of agents	70%	48%
Direct sale	61%	39%
Wine importers	n.a.	78%
Other	9%	0%

It is important to acknowledge that within the 'other' category the main answer was to case of distribution through a parent company. This data confirms the trend towards vertical integration that characterised the Portuguese wine sector in the latest years, where in particular Port traders tries to overcome the uneven bargaining power with distributors, substituting them, at least in limited parts of their distribution activity. In other cases, instead, the producers participate in the distribution

93 Note that IVDP provides also sale contract templates; however during the research, the use of such templates has rarely been confirmed.

companies, through limited share participations, which allow a possibility to influence the strategic decisions of the distributor given the participation of (at least) one director in the company board.

If we look at the salient features of the contractual relationships, the contracts are annual and written (but usually short and not detailed), with the possibility of renewal. Although stability is achieved in practice, its perception by producers is lower, as competition is high and distributors exploit this situation by exerting pressure on their counterparts in order to gain better deals (e.g. lower prices for products or different allocation of risks). Moreover, the recent recession pushes for a reduction in the number of wines included in the distributors' portfolios. In addition, co-determination of the type of product is not common, as the distributors usually define the type of wine, and producers must comply with it. However, in a few cases where the producer can guarantee a large quantity and stable quality of wine, cooperation could be achieved on the provision of services connected with sale, such as tasting or the education of salesmen in distribution etc.

An element that has also affected the Port segment is the increased relevance of private labels, which are used on the one hand to exploit the excess of wine, and on the other to enter the scaffolds of supermarket chains. A peculiar case is the case of a distributor that instead of substituting the label of producer with a new one, either linked to the distribution name or fictional, it adds the trademark of the distributor to most part of the wine in its portfolio. In this case the distributor joins the reputation of the product with its own, as a form of quality guarantee.

4. Networks in Production and Distribution

A number of networks in production, distribution, and promotion services have been identified in the RDD region.

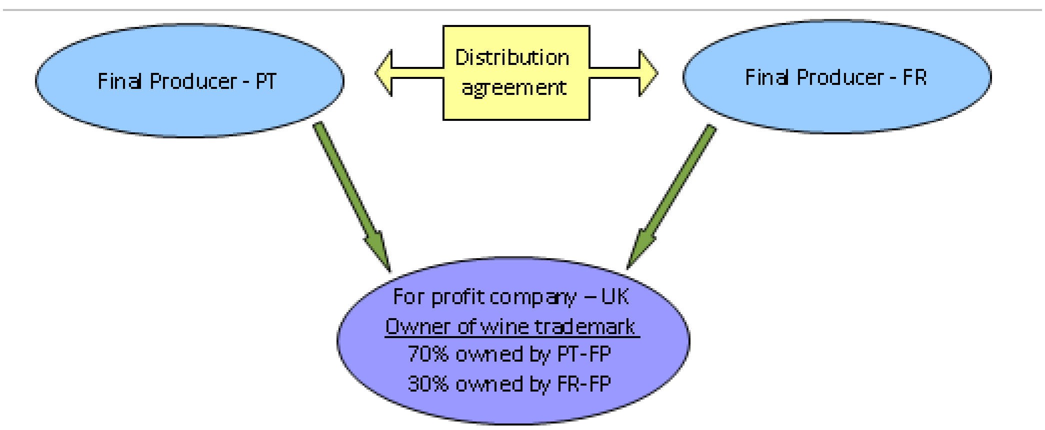
Regarding production, organisational networks such as cooperatives play a relevant role in overcoming the fragmentation of land ownership in the RDD. There are 23 cooperatives registered in the IVDP which cover 45 % of the overall production of RDD wines. The data shows that, in the wine sector, the cooperatives mainly carry out the activities of grape-growing and wine-making, while some of them also engage in bottling and commercialization activities. Other activities provided to the members are agronomic and administrative consultancy, the latter mainly related to the implant and ex-plant of wineries, the declaration of the land dedicated to wineries, etc. In few cases incentives to increase the quality of grapes have also been found, such as 'special projects' where members could be paid more for their products when these achieve a pre-defined quality level (usually these grapes are used for the high quality wines commercialised under the label of the cooperative). Membership for grape-growers also contains an exclusivity clause for the overall production of grapes, whereas an equivalent obligation on the cooperative's side does not exist in theory; yet in practice, the cooperatives buy all the production in order to keep the members within the organisation, and prevent members engaging in opportunistic behaviour. The cooperative structure, however, no longer seems able to keep up with global competition in the wine market. This is due, on the one hand, to the traditional approach that members as well as the legislature have toward the cooperative company, with little or no intervention to improve internal governance in terms of efficiency and effectiveness. Yet, difficulties arise in relation to the strong competition among cooperatives in neighbouring areas, which prefer to result in mergers and takeovers, than to build up collaborative projects among them.

The objective of overcoming land fragmentation, coupled with that of sharing resources in oenology, marketing and general management also guided the creation of a public limited liability company that is essentially focused on the production and marketing of Douro DOC wine. Formally, it replicates the structure of a cooperative, as it buys the grapes (and wine) from its shareholders, transforms them, bottles the wine and commercialise it in both distribution channels; however, as distinct to cooperatives, it has a strong market orientation, which is evident in the quality improvements it requires of shareholders, and brand building. In practice, technical support, from agronomic to enological, is provided to all shareholders/suppliers at various levels. The shareholders' relationship is also coupled with contractual links based of elements that guarantee stability and participation, namely well-defined quality, quantity and prices of wines and grapes to be provided by each supplier, regulation of management and use of farms' brands (when high quality is achieved, *quinta*'s names are used), and monitoring of the final quality of wine by external panel of experts.

Contractual networks are also present in the area, mainly regarding the supply of grapes and bulk wine; although they concern different products, they address similar needs: in case of grape supply networks, the final producer builds up a stable relationship with his suppliers, mainly concerning high quality grapes, and due to fragmentation of land, quantity in each contract is not very relevant. The relationship is defined through a written contract where quality requirements are set, with penalties or refusal clauses in the event of non-compliance. The monitoring activity goes along the grape-growing process, and in general the supplier is more of an executor of the buyer's decisions. The same formalisation level is achieved in case of bulk wine supply; in this case, however, the number of suppliers is more limited, but the quantity of wine is increased. The creation of a network is again based on the need to stabilise the flow of raw product with a guarantee of its quality. In this case, the hierarchical element of the relationship is also strong, as the buyer defines precisely the type of wine to be provided, with continuous monitoring activity both in the grape-growing process and in the wine-making phase. Evidence shows that this kind of network is used both for nationally-based relationships and in the case of international ones.

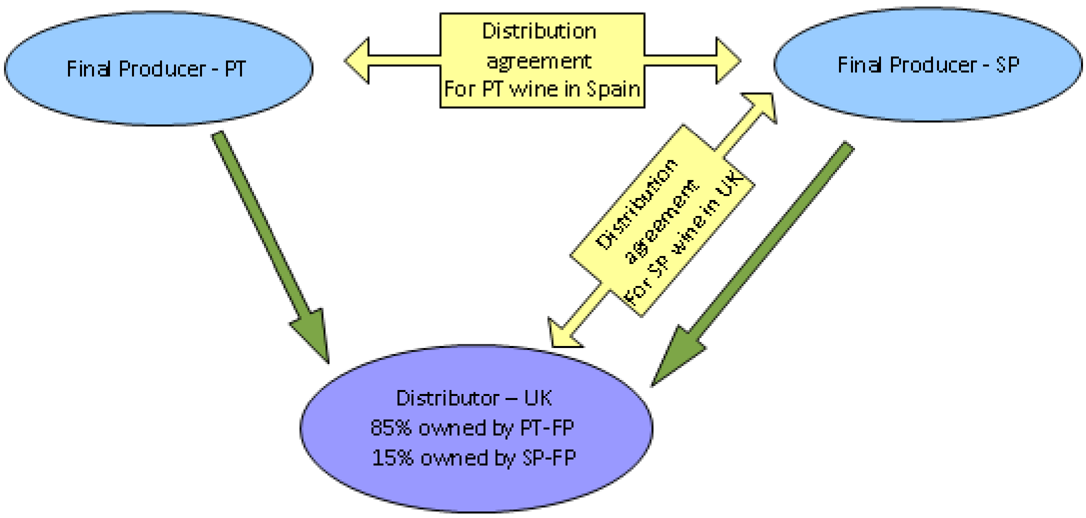
Concerning distribution, organisational ties are increasingly used in order to stabilise contractual relationships. There has been a move towards increased cooperation in distribution between wine-making companies, based on incorporated joint-ventures: new firms such as Active Brands, Viborel and Prime Drinks were created as limited liability companies aimed at sharing the costs involved in wine distribution through large distribution chains. Furthermore, distribution agreements have been coupled with a share in the company controlling the brand's trademark. As in the case of a Portuguese final producer and a French distributor, the distribution agreement between the two includes an exclusivity clause for worldwide distribution rights concerning Port and Sherry brands. However, following an integration process between the former British distributor since 2005, the distribution of the Portuguese producer in UK moved from the French distributor to (almost) owned distribution company. The move did not the affect the existing global distribution agreement, as the latter fully supported the transfer of distribution activity to the controlled firm. At the same time, the distributor's investments in the relationship are still guaranteed, by the important shares it has in the controlled company that owns all Port brands of the Portuguese final producer (see the figure below).

Figure 3 – Network for foreign distribution among producers



Within the supply of promotional services, there are two important cases in which coordination among producers provides a good basis to access new markets with high quality products. The first case is an association set up by 11 European producers with complementary brand portfolios to leverage the international promotion of their wine and spirits. The selection of participants is based on the type of enterprise, which should be family owned, and the quality of products, which should fall in the super-premium category. The association in itself has only a promotional objective, which is carried out through the collective presentation of highest quality wines in limited edition cases. Nonetheless, such organisation provides a forum which enhances the creation of collaborative ties among producers. In particular, mixed networks arise at the bilateral level: for instance, the participating Portuguese producer has built up a contractual and organisational relationship with the Spanish producer concerning distribution in Spain and in another foreign markets (see figure below). The other types of agreements among the members include joint ventures, distribution agreements, promotion agreements and technical support (e.g. corks from Portugal). A feature of this association is the low level of competition among the members, due to the different types of wines supplied by each producer which each represent DOC regions, though they are all in the same segment of the market.

Figure 4 – Network for reciprocate foreign distribution among producers



Another example is another informal network set up by a group of local winemakers in order to cooperate in the promotion of a specific type of wine, namely the DOC Douro. The association is formed by five producers which have chosen to coordinate their efforts and share their knowledge, technology and experience in order to promote the production of their own quality wines. This decision is the outcome of a strategy to build up a reputation of a type of wine that is still neglected in international market, and which is thus still able to grow and win consumer interest, in comparison to Port, whose market is already saturated. This informal association is mainly active in the international market through the collective presentation of Douro wines in tastings and fairs. However, this has not resulted in a coordinated strategy for the distribution of wine abroad, or at least it has appeared only by chance. The possibility of more formal coordination has recently been advanced, but it is still in its infancy, due to difficulties in defining reciprocal obligations.

5. Perspectives and Conclusions

The RDD shows interesting and innovative networks both at national and international levels.

The research showed that high quality wines are the main triggers for networks creation, either through formal or informal models, also with an increased importance of transnational dimension. In a different perspective, regulation and, in particular, DOC rules affect strongly not only market relationships, but also the shift towards strategic ones, as the case of Port wine showed.

On the distribution side, the concentration trend that characterized the LSD pushed a similar process in the production side, where the final producers tried to overcome their limited negotiation power with a wider offer of branded wines and a wider production capacity. However, such situation did not perfectly succeed, except for the mentioned examples, in increasing the level of cooperation in this sector between distributors and final producers.

ANNEX I

Douro region - Volumes of production, 2008

Table created according to IVV 2008

Total production Portugal 2008 (harvest)	5,596 millions hl
DO Production Portugal 2008	2,865 millions hl
Total production Douro 2008 (harvest)	1,370 millions hl
DO production Douro 2008	1,229 millions hl
G.I Production 2008	3,508 hl
Table wine production 2008	105,809 hl

Chapter IV
Inter-firm networks in the Spanish wine industry: the case of the Valencian Community

by Juan Ignacio Ruiz Peris[94]

1. General Data

Spain is the third largest wine producer in Europe and in the world, with an estimated production of 41,909 million HL. The estimated production for the 2009-10 campaign is around 38,000 million HL[95], which implies a substantial reduction compared to the past. The Valencian Community is the fourth largest wine producer in Spain, with 2,322,000 HL[96]. Spanish vignoble has reduced in the last few years but continues to be the most widespread in the world[97]. In 2009 the vignoble reduced by 4.6%[98]. The Valencian Community is the third largest Spanish Community as regards the spread of vignoble[99].

Spain is the second largest exporter of wine by volume in the world. The Valencian Community is the fifth largest in Spain, exporting €121 million-worth in 2008, an increase of 8.4% in relation to 2007[100]. Its main markets are Russia (14.6%), Germany (10.51%), France (10.32%) and the United Kingdom (9.23%). There are also important African markets such as Nigeria (5.77%) and the Ivory Coast (5.15%). However, United States represents only 3.28%[101].

There are some important modern tendencies in Valencian wine[102] production: the transformation from exclusive bulk production to a continuously increasing D.O. or non-D.O. bottled production; modernization; the use of new oenological practices; and the use of new knowledge gained from *Edaphology*.

The study focuses on two of the three D.O.s of this Community: "*Utiel-Requena*" and "*Valencia*", and includes also the Valencian part of D.O. "*Cava*" and IGP "*Vino de la Tierra del Terrerazo*"[103]. The D.O.s examined are quite different: "*Utiel-Requena*" is an homogenous D.O. with similar production characteristics to D.O. *Castilla la Mancha*, from outside the Valencian Community. The D.O.

---

[94] Catedrático de Derecho mercantile, Universidad de Valencia (ignacio.ruiz@uv.es).

[95] Source: European Commission estimation of 15th December 2009; *ex post* estimations of Spanish Ministerio de Medio Ammbiente Medio Rural y Marino (MARM) distributed by the Observatorio Español del Mercado del Vino (OEMV) reduced to 36,1000 millions HL.

[96] The largest producer is Castilla la Mancha with 17,573,000 hl. The second largest is Extremadura with 3,049.000 hl, the third largest is Catalonia with 3,033,400. The Valencian production increased by 0.5% in relation to that of 2008, going against the general Spanish tendency and previous tendency displayed by this region to reduce output. (Source: OEMV data from MARM September 2009).

[97] Source: Instituto Valenciano de la Exportación (IVEX) June 2009.

[98] The reduction is mostly concentrated in Castilla la Mancha, Navarra, Murcia and Aragon. This is consequence of the new "procedimiento de abandono definitivo" of the new CMO. From the 73 million of hc selected for the European Community subsidies, 45 million of hc is from Spain.

[99] The largest Community in vignoble extension is Castilla la Mancha with 542.944 hc, which has been reducing constantly over the last 30 years. The second largest is Extremadura with 87,078 hc, which has experienced a limited reduction over the last 30 years. (Source: OEMV over Encuesta sobre Superficies y rendimientos de Cultivos – ESYRCE from MARM data from December 2009).

[100] Source: Instituto Valenciano de la Exportación (IVEX) June 2009.

[101] Source: Instituto Valenciano de la Exportación (IVEX) June 2009.

[102] We use the term "Valencian wines" to refer all wines included in the study. When specific D.O.s are referred to, wel use the official D.O. name.

[103] It does not include: D.O Alicante, IGP "Vins de la Terra de Castelló".

Valencia is more heterogeneous[104], and produces different varieties – in some cases similar to that of D.O. *Jumilla,* from outside the Valencian Community-.

1.1. Property structure

When it comes to the structure of property, there are 22,700 viticulturists for approximately 80.000 HA. There are only 225 viticulturists with more than 20 HA. There is an important presence of cooperative organizations in grape growing and wine production in the Valencian Community and the D.O *Utiel –Requena* and *Valencia*. Regarding private producers, most of them are family businesses. They are usually individuals.

The most important network organization in Valencia in the cooperative field is ANECOOP, a second-tier agro-alimentary cooperative with an important wine section. The most important first-tier cooperative in the wine sector has a turnover of €8.5 million. This organization has reoriented its activities, focusing on the production of bottled good quality and moderate price D.O wine. It is a member of the abovementioned second-tier cooperative, that is in charge of the distribution of its wine with a turnover of €15 million.

The members of cooperative companies are mostly individual grape growers. As regards grapes' conferment they have factual exclusivity deriving from market conditions in connection with statutory duties. Entry and exit are in theory free, but the fact is that the cooperative becomes closed when it does not have enough possibilities to sell the volume of wine made from the grapes of its members. The financial structure depends on its members and on the benefits of the commercialization of the wines.

1.2. Production chain structure

The number of cellars is around 243, of which 146 also bottle wine.

There are different models of the production chain in Valencia.

The first is integrated production within a single firm, generally family-owned limited liability companies[105], which have changed from their traditional bulk wine orientation to the market of bottled D.O. wine, or entered the wine market in last 15 years with connexions to other economic sectors, such as construction or furniture production.

A second group of private producers buy their grapes from selected grape growers, paying better prices than the market and establishing a continuous relationship, with technical know-how transfer to the grape growers[106]. Most contracts are oral and the continuity of the relationship is linked to mutual satisfaction.

The third group is formed by important traditional wine merchants. Today producers have different lines of high quality products, and in this case it buys grapes in similar conditions as those of the second group. Another producer also buys bulk wine from the market, sometimes from the cooperatives or out of the D.O. of Valencia to produce bottled non-DO wines whose destination is Africa or elsewhere abroad.

The fourth group is formed by some cooperatives which produce bottled wine, preferring to use the grapes of its grape grower members, in some cases in connexion with experts provided by American

[104] DO Valencia is divided into 4 sub-areas: ALTO TURIA (Chelva, Alpuente), VALENTINO (Lliria, Villamarchante), MOSCATEL DE VALENCIA (Montroy, Turis) and CLARIANO (Fuente la higuera, Fontanars).

[105] Between three and ten members, with the capital (normally) distributed between siblings in an equal way. Parents often have a higher share (they are sometimes controlling partners).

[106] A better price which, furthermore, increases annually according to the IPC.

distributors who cooperate in the creation of modern and good quality wines – some with 90 points Parker- DO bottled wines.

A fifth group is formed by cooperatives that continue the traditional production of bulk wine, to be blended and bottled in foreign countries, and sold it to wine merchants, or in some cases to other cooperatives that produce D.O. bottled wines.

The sixth one is formed by bottled DO producers which export bulk wine – for commercial reasons - to be bottled at the destination – for example China- by joint ventures in which they participate.

The majority of bulk wine production remains in the cooperative sector. There is also excess production from family-owned private enterprises, with the destination in most cases of the alcohol and spirits drinks industries. The majority of bottled non-DO wine is in the private sector, and its production chain structure is that of the third group; the production of D.O. bottled wine is done in all the models of chains, the second, third and fourth groups being most important in volume. The sixth model is just beginning to be used.

The evolution seems linked with the role of the cooperatives in bottling D.O. wines, while private producers focus on medium and high quality wine production, with competitive prices in relation to the wines of emergent countries in international context, and production of wines by demand. There is also a tendency to recover Spanish autochthon varieties hitherto forgotten, with historical presences in both D.O.s as "Mandó", or not sufficiently developed such as "Merseguera" or "Monastrell" – D.O. Valencia-. There is also research and development being undertaken to transform widespread autochthon varieties so that they can be used for blending as "Bobal" – D.O. Utiel – Requena- enabling them to be used for mono-varietal production or blended with other traditional Spanish grapes which do not have an important historical presence such as both D.O.s as "Tempranillo". There is also an important production of "Moscatel" and "Moscatel de Alejandría".

The majority of wine producing enterprises are cooperatives or family producers with the form of a limited liability company. Their size in most cases will be micro enterprises, and in some cases small and medium-sized enterprises. In the case of grape growers, they are mostly individuals.

1.3. Distribution chain structure

For more than a century Valencia has had, and maintains, close relationships with foreign wine merchants, some of them established in the Port and City of Valencia, after the *Phylloxera* crisis which destroyed dynasties of wine merchants.

In addition to the traditional relationships, formerly focused on bulk wine trade which have evolved by incorporating the bottled wine trade, new commercial contacts, focused on bottled wine with a global reach, have been made in the last 20 years. The Community of Valencia is a region with an important export tradition, not only in agriculture, but also in light industry such as furniture, shoes, toys, ceramics, and porcelain. In fact, the majority of the bottled wines are consumed outside the Community, in foreign countries such as the USA, Germany or France, and not in the other regions of Spain where it has less of a presence.

This important export tradition makes it easy to connect interested buyers with our producers. Tourism in Spain has also proved to be an occasion to start building good business relations between Spanish producers and foreign distributors or importers. This creates a scenario of atomized distribution chains that correspond mostly to a simple model of a stable relationship between foreign distributors or importers, and producers from Valencia, based on the mutual satisfaction. Local distributors for the internal Community of Valencia market are small, with a maximum of one million sales per year. In the case of bulk wine, the majority of the distribution continues to be done by traditional national and international distributors, in addition to new destinations such as eastern European countries.

The second distribution model is the use of the second-tier cooperative to coordinate and organize the distribution of wine produced by first-tier cooperatives.

There are some producers who sell wine directly to foreign countries to the HO.RE.CA. channel and also to supermarkets.

In some cases there are strategic alliances with foreign distributors, such as in the USA or China.

2. *Main Characteristics of Contractual and Organizational Relationships in Production and Distribution*

2.1. Production

The contractual relationships in production are almost exclusively national. There are some international contractual relationships with foreign partners in production to establish the co-determination of the characteristics of a wine between a Spanish producer and foreign distributor[107]. In the organizational field, all of the members of cooperatives, and most of the partners or shareholders of wine producers, are national. There was a presence of foreign distributors in the company capital of some private producers[108].

Wine producers' relationships with grape growers are mostly oral. This applies also to cases of long-term relationship and transfer of know-how and technology to grape growers.

There are organizational relationships in the context of cooperatives. In this case the relationships are governed by internal statutes and articles. There are not parallel contracts between wine producer cooperatives and grape grower members. The decision-making power remains in the General Director of the cooperative. There are members' duties to sell to the cooperative the majority of production. There is only a limited duty of the cooperative to buy the members' production. In fact, this relationship works out as an exclusivity regime because the cooperative offers better conditions than the market, and grape growers generally follow the instructions of the cooperative regarding grape growing.

2.2. Distribution

There are national and international distribution relationships. The internal distribution relations focus mainly on the Valencian Community in connexion with local distributors and HO.RE.CA.. There are still relatively few sales to large scale distributors (LSD) which always have had market relationships with wine producers[109].

---

[107] An important example is that concerning a contractual joint venture between a second-tier cooperative and an importer from the US established 3 years ago for the production of a special wine, following market trends in the US market. This is an annual contract, in practice renewed every year. A US trademark is used in this case. Concurrently the other half of the wine produced under this agreement is bottled under a trademark of the cooperative, though produced under the same requirements linked to the US market (Spanish trademark). This is a case in which trends established in the US market are considered to be anticipatory of global trends and for this reason they help innovation in the production at a fairly high level of quality. Oenologists paid by the US partner are sent to visit Spanish premises, not only at the second-tier cooperative's site but also at the grape-growers', with the collaboration of the first-tier cooperative.

[108] This is the case of a family enterprise at its fourth generation (the enterprise was created in 1885), with 150 workers and revenue of €40 million. Ownership includes a capital share formerly owned by an African importer (which now owns a different business in construction), with which the private producer used to have a collaborative contractual relationship, and a French agency company still operating for it in Africa.

[109] For example, the relationship with a large distribution chain normally includes general terms (framework contract) with no obligation to sell/buy. In a few cases there might be exclusivity in favour of the importer, especially in concentrated markets such as Japan or Hong Kong, which is the most important market in Asia. Depending on the market, direct sale

The Valencian producers have extensive distribution relationships throughout the world. The international relationships present differences depending on the national law of the importing country. There are written contracts with Nordic countries with state monopolies, and also with Canada. In the most of the other cases there are no written contracts but only preparatory documents such as e-mails or faxes, bank orders, courier documents, and in isolated cases documentary credits. Often the distributor is known and there is a relationship of trust existing between the seller and buyer. Contractual power is generally in the hands of distributors because they have more economic power than producers, are more concentrated, and face an excess of production in the price/quality markets where the wines of Valencia are placed. Moreover, Valencian wines are in competition with wines from other Spanish regions in the international context and with those coming from emergent countries, in addition to them not being key elements in the stock of wine cellars throughout the world.

In general, relationships between producers and distributors are market relations also when they are long term. The existence of a written contract also has an asymmetric value for the parties because distributors may always reject the wine ordered, alleging the "taste clause" in widely subjective terms – for example if the market price is lower than the contract price - while the producer may be objectively liable in the case of non fulfilment of the time, quantity or varietal duties. So written contracts never imply a warranty for the producer. We have not detected framework contracts. There are direct relationships between Valencian wine producers and foreign LSDs.

Organizational forms for international distribution chains are structured using joint ventures and strategic alliances.

3. The Emergence of Networks

Valencian D.O. come from a history of market relationships among grape growers, bulk wine producers and wine merchants, as in other agricultural markets in accordance with the individualistic mentality of our regional culture. We are currently observing the emergence of network relationships defined by interdependence and stability, for different reasons: export needs, professional management, marketing possibilities, or technical improvement.

This section will focus on both contractual and organizational networks in production and distribution markets. We deal also with the reasons why such networks emerge, and the factors influencing, positively or negatively, their emergence in Valencian D.O.s.

In production we may found a few different kinds of networks, mainly: grape growers' cooperatives producing bulk and bottled wine; and grape growers linked with private wine producers and foreign exporters which collaborate and contribute to co-determining the modes of the wine production.

In distribution we have found second-tier cooperatives commercializing bulk wine or bottled wine, joint ventures, and strategic alliances to export wine.

3.1. Production networks

Wine bottling production cooperatives are a consequence of the new European legal framework that prohibits the blending of D.O. wine making, making the traditional market for bulk wine less profitable. The cooperatives will foster the grape growers' common interest to become producers of higher price wine and to benefit from the higher value generated by the bottled wine[110]. Although this is the main reason for the creation of cooperatives, there are some additional effects coming from their

---

to the client may be practiced (mainly for large distribution chains), indirect sale through commercial agents, sales to importers, or sales to importers via commercial agents.

[110] It should be mentioned that not all Valencian grape-growers' cooperatives bottle their wines.

existence. Among these effects are: the influence of professional management on grape growers' members' businesses, the increasing of market possibilities and technical improvement.

In the case of private producers, continued relations with selected quality grape growers are also fostered by adequate incentives in terms of the remuneration of grapes for grape growers, within a long-term relationship which is grounded on mutual satisfaction. For wine producers, the main objective is to ensure stability and control of quality of the production. It generates some effects such as know-how and technology transfer to the grape growers, and an important improvement in their production. This type of network is mostly contractual (based on the link among bilateral grapes' or bulk wine sale contracts). Some of these networks involve grape-growers cooperatives and, within these, selected groups of grape growers.

Exporters that co-determine the modes of wine production seek profitable benefits generated from having control over the production of high quality wine – some have attained 90+ points in the Parker Guide for young and cheap wines. Private producers and cooperatives involved in such relations obtain know-how and technology transfer, better prices for the bottled wine, prestige and global knowledge, and good access to foreign markets. In some cases such relations evolve into transnational networks, mainly structured as a set of linked contractual relations coordinated by the importer through a strict collaboration with the Valencian private producer or (second-tier) cooperatives. If compared with other examined areas within this research, the use of corporate structure or the one of mixed networks (contractual and organizational) are by far less common (see for a different picture chapters I and II).

3.2. Distribution networks

Second-tier cooperative wine networks are mainly directed to provides members with benefits in terms of legal, technical, management, marketing, and credit facilities in D.O. Valencia. These facilities and services are particularly offered by the above-mentioned second-tier cooperative to its cooperative members. These operate not only in the wine market but also in fruit and vegetables markets and have important export experience[111].

Joint ventures and strategic alliances with foreign distributors are based on interest in having access to foreign markets and in obtaining a better price for production. This access is facilitated for foreign distributors which know the market and have a distribution network in it. In some cases, it includes co-determination of the product and transfer of know-how and technology.

There are interaction export requirements, professional management, marketing possibilities and technical improvement.

3.3. The factors influencing the emergence and form of networks

The internationalisation of market influences production choices, adapting the production to the challenges of foreign markets. There is a chain of knowledge and the transfer of it between the members of the chain, from the distributor, that knows the market and the particular taste of the consumers, to the producer. The global economic context favours the creation of international networks.

In some cases we can observe the influence of the international dimension in the distribution strategies creating networks, as in the case of joint ventures to import and distribute Spanish bulk wine in China, or the strategic alliances with US importers and distributors. The legal framework in these cases favours the creation of networks.

[111] The three wine producer cooperatives, belonging to the second-tier cooperative, mainly have complementary varietal productions.

D.O regulation maintains a variety of tastes of the wine, creating a rich variety of different wines globally, which is unprecedented. At the same time D.O regulation limits the possibilities for evolution of the members, making it more difficult for them to follow trends in the most important wine markets.

Probably the same reasons that favour the creation of networks, the common promotion of the products occur partly due to the activities of the D.O. In this way, the presence of the D.O could be seen as an obstacle to the creation of networks.

4. Perspectives and Conclusion

Valencian cooperatives and private producers maintain their bet to exportation. The production of D.O. or non D.O. bottled wine is increasing continuously in our Community. The implementation of initiatives which have been successful elsewhere is the most efficient way to be successful here too. Valencia has a traditional culture of enterprise. Networks have increased the knowledge of the Valencian producers and the quality of their wines, modernized their technology and marketing, and favoured the successful access to foreign markets such as USA or China. In this context we may see an important expansion of networks in the near future.

ANNEX I
D.O. Valencia and D.O. Requena-Utiel: production

Total production Spain 2009[112] (harvest)	41,909,000 HL
DO Production Spain 2009[113]	16,076,000 HL
Total wine production Valencia 2007/08 (harvest)[114]	780,000 HL
Total D.O. Production Valencia 2007/08[115]	680,000 HL
Total Wine Production Requena-Utiel 2007/08 (harvest)[116]	1,700,000 HL
Total Wine Production D.O. Requena-Utile 2007/08[117]	370,000 HL

ANNEX II
D.O. Valencia and D.O. Requena-Utiel: surface of the vineyard

Total Land Spain 2009[118]	1,084,774 HA (reduction of 4%)
Total D.O. Land Valencia 2007/08[119]	14,800 HA
Total D.O. Land Requena-Utiel 2007/08[120]	41,800 HA

112 Source: European Commission. Estimates as of 16 November 2009. Available on the web: http://www.oemv.es/docs/GZCO_OEMV_Info_09_12_04_Produccion_de_vino_en_la_UE.pdf

113 Source: Observatorio español del mercado del vino (OEMV): http://www.oemv.es

114 Source: DO Valencia.

115 Source: DO Valencia.

116 Source: DO Requena-Utiel.

117 Source: DO Requena-Utiel.

118 Source: "*Encuesta de Superficies y Rendimientos de Cultivos (ESYRCE)*" prepared by the Ministry of the environment and rural environment. Available on the web:
http://www.mapa.es/estadistica/pags/encuestacultivos/2009/ESPANAYCCAA.pdf

119 Source: DO Valencia.

120 Source: DO Requena-Utiel.

Chapter V
Inter-Firm Networks in the Hungarian Wine industry

by Peter Hardi, Diana Sidlovits e Krisztina Büti[121]

1. General Economic Context

The Hungarian section of the research on inter-firm networks in the European wine industry has concerned the totality of wine growing regions while we can find similar economic context and production structures in the different regions because of the importance of Hungarian wine production in the European level.

National wine production averaged 3,8 million hl in the last 5 years (2004-2008)[122] *(HNT, 2008)*. It made up a mere 2% of total EU wine production that is equivalent of the 8th rank in the EU and 16-18th rank worldwide.

The national surface dedicated to grape growing was 81 852 ha of vineyard in 2008[123] *(HNT, 2008)*. Vineyard surface decreased significantly by 12% from 1999 to 2008 due to the implementation of abandonment premium of the wine-CMO after the EU accession, the motivating grubbing-up policy of the new wine-CMO, increasing competition of the imported cheap red bulk wines, and the low overall profitability of viticulture.

The majority of vineyards can be found in 22 wine appellations (delimited zones) (*Figure 1*) where Hungary produces mainly PDO wines on 48,898 ha, PGI wines on 20,014 ha and table wines on 12,939 ha. Regarding wine-growing areas classification, Hungary produces 60% of PDO, 24% of PGI and 16% table wines[124] *(HNT 2008, FVM, 2008)*. Proportion of different qualities can vary by delimited regions. We can find the highest ration of PDO wines in Tokaj, Szekszárd, Villány, Sopron, Pécs regions, where this ration is more than 90%, while in Kunság region the PGI and table wines are the most important with 62%, and PDO wines represent only 38% of total vineyard surface.

---

[121] This chapter has been prepared by the Interfirm Networks Project Team at the Center for Business and Society, CEU Business School. Team members: Diana Sidlovits, PhD, Councilor, National Council of Wine Communities, Budapest; Krisztina Büti, Senior Lecturer of Finance, CEU Business School, Budapest; and Team Leader Peter Hardi, PhD, Professor and Director, Center for Business and Society, CEU Business School, Budapest.

[122] Source: National Council of Wine Communities (Hegyközségek Nemzeti Tanácsa – HNT), 2008

[123] Source: National Council of Wine Communities (Hegyközségek Nemzeti Tanácsa – HNT), 2008

[124] Source: National Council of Wine Communities (Hegyközségek Nemzeti Tanácsa – HNT) and Ministry of Agriculture, 2008

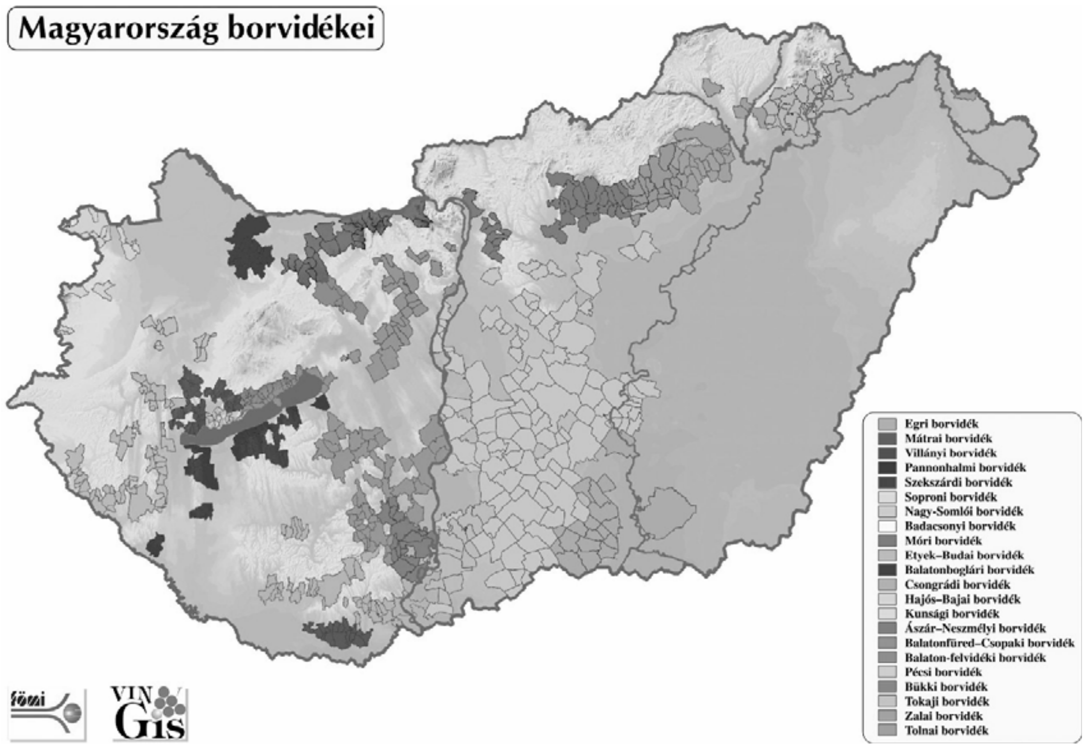


Figure 1: Delimited wine production regions in Hungary (source: FÖMI - Institute of Geodesy, Cartography and Remote Sensing, 2008)

Regarding the quality of vintage, 300 000 tons of grape are classified in PDO category. This represents 68% of total grape production in Hungary. We can observe a robust improvement in harvest quality: the share of PDO category has grown by 10% during last 10 years (from 58% to 68%) (HNT, 2008)[125].

The total volume of imported wine amounted to 546 324 hl in 2007 (Eurostat, 2007)[126], equivalent to 14,3% of total wine production. Traditionally imported wine accounted for only a marginal share (30,000-60,000 hl/year) of the domestic market (3 million hl), and served merely to complete the national wine assortment, particularly in case of red wines. However, after Hungary's accession to the EU, wine import increased: the tendency shows tenfold growth from 2004 to 2007(!) largely due to the expansion of very cheap Italian red bulk wine imports.

Hungarian wine export volume reached 707 116 hl in 2007(Eurostat, 2007)[127], which corresponds to 18,8% of total wine production. Wine export volume fell 50% during the last 10 years. EU countries represent the most important market for Hungarian wines, the main export destinations are in order: Germany, Czech Republic, Slovakia, Russia, Great-Britain, Poland, Lithuania and Finland.

Total domestic wine consumption amounts to 3 million hl per year. We can observe an opposite tendency of wine consumption in Hungary in comparison with the other European traditional wine producer and consumer member states where the consumption has been decreasing for 30 years. In Hungary it increased sharply in the first decade following the collapse of communism, and it remained relatively stable during the last 10 years and a rising demand of quality wines has been registered

[125] Source: National Council of Wine Communities (Hegyközségek Nemzeti Tanácsa – HNT), 2008

[126] Source: Eurostat, 2007

[127] Source: Eurostat, 2007

during last period[128] *(Totth and Hofmeister-Tóth, 2005)*. Hungary is a traditional wine consumer country, where individual average wine consumption is relatively high: 32 litres /capita/year. This quantity is very close to the European average (34 litres/capita/year)[129] *(KSH, 2008)*.

Structure of grape-wine production and the ownership structure of wine-growing formed after the privatisation of Hungarian wine sector are the relevant factor in inter-firm collaborations. The ownership-structure of Hungarian wine production changed very rapidly during a rather short period after the transition*:* considering the registered capital of companies in 1995 42% of capital was still in state propriety and 58% were in private ownership[130](*Lakner and Hajdu, 2002)*, however, for 2000, the state propriety represented 8%[131] (*Lakner and Hajdu, 2002)*. One part of wine making firms has been bought up by foreign (12% of registered capital of companies in 2000) or Hungarian investors (80%), while the other part has failed or has been divided.

While before transition, 30 state companies and 50 cooperatives assured the Hungarian wine production, which represented a very integrated system, because these entities assured every stage of technical itinerary of wine production. Actually, nearly 7,000 enterprises (in 2008) deal with grape-vine transformation, wine-making and wine-trade, where 80% are the micro enterprises that produce less than 80 hl of wine per year and only 35 enterprises can be considered as great wine-growers with more than 10,000 hl of wine production. We can observe certain abandonment of viticultural activity and domain concentration during last years, because Hungarian extra-sectorial investors arrive to the wine sector, and form their own wine estate with several ten hectares of vineyard in their own propriety.

As a result of the Hungarian wine sector privatisation, grape-vine production and transformation have been completely separated and fragmented. The majority of lands and vineyards are in ownership of natural persons and in use of wine-growers. Companies have no right to buy lands and there are only a few wineries that possess their own vineyards. So this institutional constraint contributed to define a particular track of production structure development of the wine sector. Conversely, in case of wine production, wine growers possess only 20% of grape-vine transformation and vinification capacity, while companies dispose 80% of vine transformation and wine-making capacity[132] (*Radóczné, 2002*). Consequently, the two sides of wine production itinerary are rather interdependent.

In this situation, logically, the cooperative cellar system should be well-developed, but because of unpleasant memories of collective propriety of socialist cooperatives and the lack of confidence in each other, Hungarian wine growers are unwilling to cooperate. The problem is that producers do not believe in the efficiency of collective decision making since the partial and personal interests are stronger than the collective interests and opportunist behaviour of producers causes conflicts in the relationships. The other interpretation of the lack of cooperation is that the viticulturists, who received back their own vineyard with land restitution, have strong emotion for their propriety and "at last after 40 years" they can make their own decision linked to their activity. They are attached to the independency, even if its consequences are less efficient than the cooperation.

---

[128] See Totth, G., Hofmeister-Tóth, Á. (2005): Miért beteg a magyar bormarketing? *Marketing oktatás és kutatás a változó Európai Unióban, (* Széchenyi István Egyetem, Győr, 2005 augusztus - Tanulmánykötet

[129] Source: Hungarian Central Statistical Office (Központi Statisztikai Hivatal – KSH), 2008

[130] Source: Ministry of Agriculture, 1995 cit in Lakner, Z., Hajdu, I. (2002) : The Competitiveness of Hungarian Food Industry – a System Based Approach, Mezőgazda Kiadó, Budapest, 2002 – p. 49

[131] Source: Hungarian Association of Food Processors, 2000 cit in Lakner, Z., Hajdu, I. (2002) : The Competitiveness of Hungarian Food Industry – a System Based Approach, Mezőgazda Kiadó, Budapest, 2002 – p. 50

[132] See Radóczné Kocsis, T. (2002): Az Európai Unió új közös borpiaci rendtartásának termelési potenciált befolyásoló elemei és azok várható hatása a hazai termelőalapok változására (Measures of vineyard potential of the wine CMO and its prospective effects on the Hungarian production potential), Agrárgazdasági Könyvek, No. 5 2002, Agráregazdasági Kutató és Informatikai Intézet, Budapest, 2002

The third factor of unsuccessfulness of cooperation is the lack of capital at the level of grape vine growers and the unfavourable credit conditions in order to investments in transformation and vinification installations. The most important critique of the Hungarian wine sector privatization emphasizes that the raw material producers did not obtain transformation capacity, because the cellars were privatised separately from vineyards. Cellars were mainly purchased by the management of that time, by extra-sectorial investors or by foreign investors. Therefore, the developed ownership structure in the wine enterprises is not favourable to create cooperatives. Furthermore, the low profitability of the viticulture does not permit producers to accumulate capital and purchase a cellar or invest to the wine-making technology.

The recent analysis covers the vertical coordination forms in the Hungarian wine sector[133] (*Montaigne et al, 2005, Sidlovits et Kator, 2007)*, focusing on the vineyard and vine production control. In Hungary, we can find various organisational models in the supply system and distribution policy of enterprises that can be regrouped in three categories:

1. *Owners and development of signatures:* these companies could obtain vineyard and cellars as well during the privatisation or alternatively, some vineyard owners formed a group to set up wine producer-merchants enterprises. Now these are the greatest Hungarian wine producer and merchant enterprises, the most important exporters as well. Mostly, they function with foreign capital (German, French, Spain FDI) or with the investments of Hungarian investor groups. They produce the large part of their own grape-vines (50-90%) that they process and bottle, thus they assure their supply of raw material and control entirely the quality. In some cases, the companies outsource viticulture. These enterprises create their own signature (brand name) beside the indication of appellations. These companies hold vineyards (20-900 ha) in several appellations that cover a large part of their supply; the rest is bought from the producers of appellations with medium or long-term contracts, or purchased on the spot market depending on the requested quality. In several appellations, they are the most important merchants.

2. *Coordinators and cooperatives*: this group includes enterprises whose vineyard capacity does not produce the required amount of raw material supply, but they own cellars obtained during the privatisation, transformation, vinification and bottling equipments. It is not allowed for companies to buy land, it is limited by the Hungarian Land Act since 1994, for this reason, they are obliged to purchase grape-vines from the wine growers of appellations who possess the vineyards. These are large companies that play an important role in the coordination of wine growers in several production regions. The coordination is realised by medium or long-term contracts or annual contracts with a stable group of suppliers. These enterprises function with foreign or Hungarian capital.

In the Hungarian wine sector, actually there are only 11 recognized producers' groups[134] (Ministry of Agriculture and Rural Development, 2008), but the majority of them do cooperate only for marketing grapes or bulk wines collected from members; or they were founded with an objective to purchase inputs and assure services for viticulture or vinification. There is only one cooperative that works as a real cooperative cellar that collects grapes from its members and deals with transformation, vinification, bottling and marketing of its products. Cooperative cellars and producer organisations cover 1,700 producers and 5,200 ha of vineyard[135] *(HNT, 2006)* that is not so considerable in size, since they represent only 6% of the totality of the Hungarian vineyards. For this reason, grape-vine and wine suppliers are rather weakly concentrated in the Hungarian wine sector in comparison with the other European traditional wine producer countries, like France, Italy or the New World's producers.

---

133 See Montaigne, E., Szabó, G. G., Sidlovits, D. (2005): Examination of contracting relationships in the Hungarian wine industry, and Sidlovits, D., Kator, Z. (2007): Characteristics of Vertical Coordination in the Hungarian Wine Sector

134 Source: Ministry of Agriculture and Rural Development, 2008

135 Source: National Council of Wine Communities (HNT), 2006

3. *Independents*: In this group we can find the independent small and medium sized family owned enterprises which have been developing step by step since the beginning of 1990's. They founded wine production on their own vineyard obtained during the land redistribution and privatisation or they (the members of family) bought up land adapted for wine-growing and created new plantations. The size of these enterprises varies between some hectares and 120 ha. They strive for independence in raw material supply and to control entirely the quality of grape-vine. Therefore, they buy less and less grape-vine from the little wine-growers and withdraw from the coordination in order to solve the quality problems of raw material. They are specialised in quality and high quality wine production, they aim at "niche" and luxury products where the name of the owner of cellar is utilized as brand name.

2. Inter-Firm Collaboration along the Production Chain

2.1. General overview and inter-firm collaboration along the production chain

Regarding fragmentation and integration of production chain, overall we can describe the **Hungarian wine industry with the intermediate integration model**:

- Grape-growing is very fragmented in Hungary considering 120 000 grape vine growers and 0,3 ha of average size of vineyard where 75% of grape-growers use less than 0,5 ha of vineyard. In the delimited production regions, the average size of vineyard a slightly bigger, but it reaches only 0,5 ha used by grape growers[136] *(HNT, 2007)*.

- Transformation, vinification, bottling, labelling and distribution are highly integrated, the same circle of enterprises undertakes these activities.

We have to emphasize that **the situation is more sophisticated** compared to the general model *(Figure 2)*. Family owned small or medium size enterprises (*Figure 3)* and some foreigner owned medium sized companies (*Figure 4,5,6)* can be described by the highly integrated production chain model. These enterprises employ the following solutions to assure their raw material supply with their own grape growing coming from their controlled vineyard with the:

- vineyard renting from land owners or from the State (actually 1482 ha of state property land are used for viticulture)

- owners of winery – as physical persons – are owners of vineyards and deal with grape growing as well.

The intermediate model is typical for medium or large enterprises (wineries) held by investor groups that do not possess adequate vineyard capacity to guarantee their grape supply.

Figure 2 shows the general vertical model (intermediate model) of the Hungarian wine industry. Grape growers supply the winery enterprises with raw material usually by making annual exchange contracts (written or oral) or sometimes with long term agreements. The enterprises integrate grape growing as well by possessing their own vineyards, but their own grape production covers only a small part of their grape demand. These enterprises deal with transformation, vinification, bottling and distribution (on domestic and often on export market). In this manner, these activities are integrated by the same enterprise. Usually wineries negotiate directly with large scale department stores and HO.RE.CA.s.

[136] Source: National Council of Wine Communities (HNT), 2007

Sometimes grape growers form a producers group (under a legal form of grape supplier cooperative or limited company linked to a specific winery like in Eger or Kunság region), where owners of the winery - as natural persons and owners of vineyard and grape growers – are members of producers group. The objectives of grape growers' cooperation are the following:

- Purchase of inputs and technical services for a specific price or coordination of technical support (advise for pruning, plant protection etc.),
- Obtain state and EU (co financed) subsidy for administrative costs of function,
- Assure grape supply of a specific winery. Typically there is no exclusive exchange contract between the member of producers group and winery. If the grape grower finds another merchant who proposes a better price for grape, he can sell it for this latter winery.

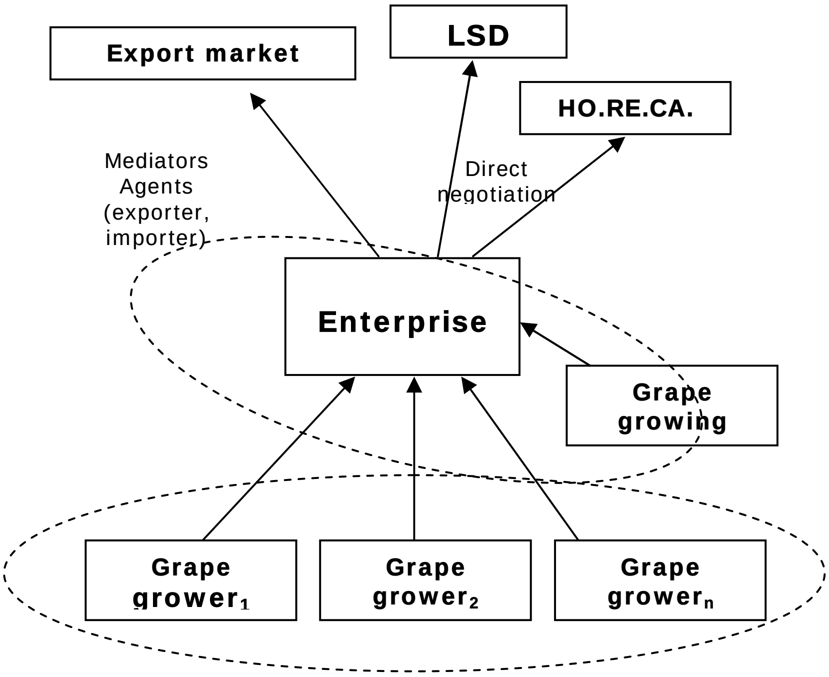


Figure 2: Intermediate model of vertical relationship in the Hungarian wine industry

In the case of **family owned and small or medium sized enterprises, the integrated production model** is prevalent: grape growing is integrated into the same enterprise, therefore it realizes an entire vineyard control. This control has several forms of implementation:

- Typically vineyards are rented from land owners (who would not like to deal with viticulture or agriculture – or
- from the Hungarian State. Actually 1 482 ha of state owned agricultural area are used for viticulture. It means that 1.8% of total vineyard surface of Hungary is state property.
- Common solution, when the owners of winery or family members – as physical persons – are owners of vineyard and they let vineyard to the enterprise or they themselves are grape growers as well.

These enterprises integrate the whole wine production: grape growing, transformation, vinification, aging, bottling and distribution (on domestic and export market). They negotiate directly with LSD and HO.RE.CA. on the domestic market and with importers on the export markets.

Financial investors outside the wine sector are those who accumulated capital with the activity in another sector than wine industry, but they invest in wineries. These investors typically **choose the integrated production model** and create their own wine estate. Generally, they specialize in high quality wine production and position their products in the "niche" market segment, where the owner's name or the name of the domain functions as a trade mark. Therefore, they aim at controlling the entire process to avoid the risk of quality problems. Consequently they do not purchase grapes from local viticulturists or on the spot market.

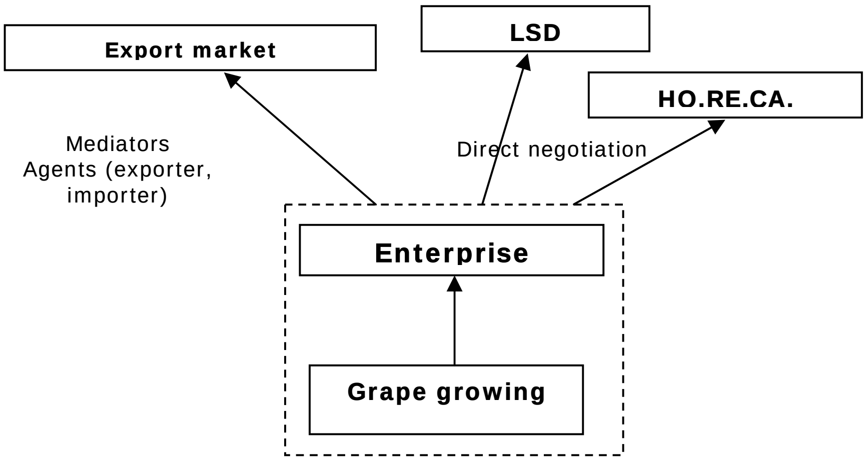


Figure 3: Integrated model of production in the Hungarian wine industry

Regarding foreign property enterprises created after the privatization, several types of solutions emerged for the organization of production and distribution. Here we present some interesting cases.

1. Case (I)

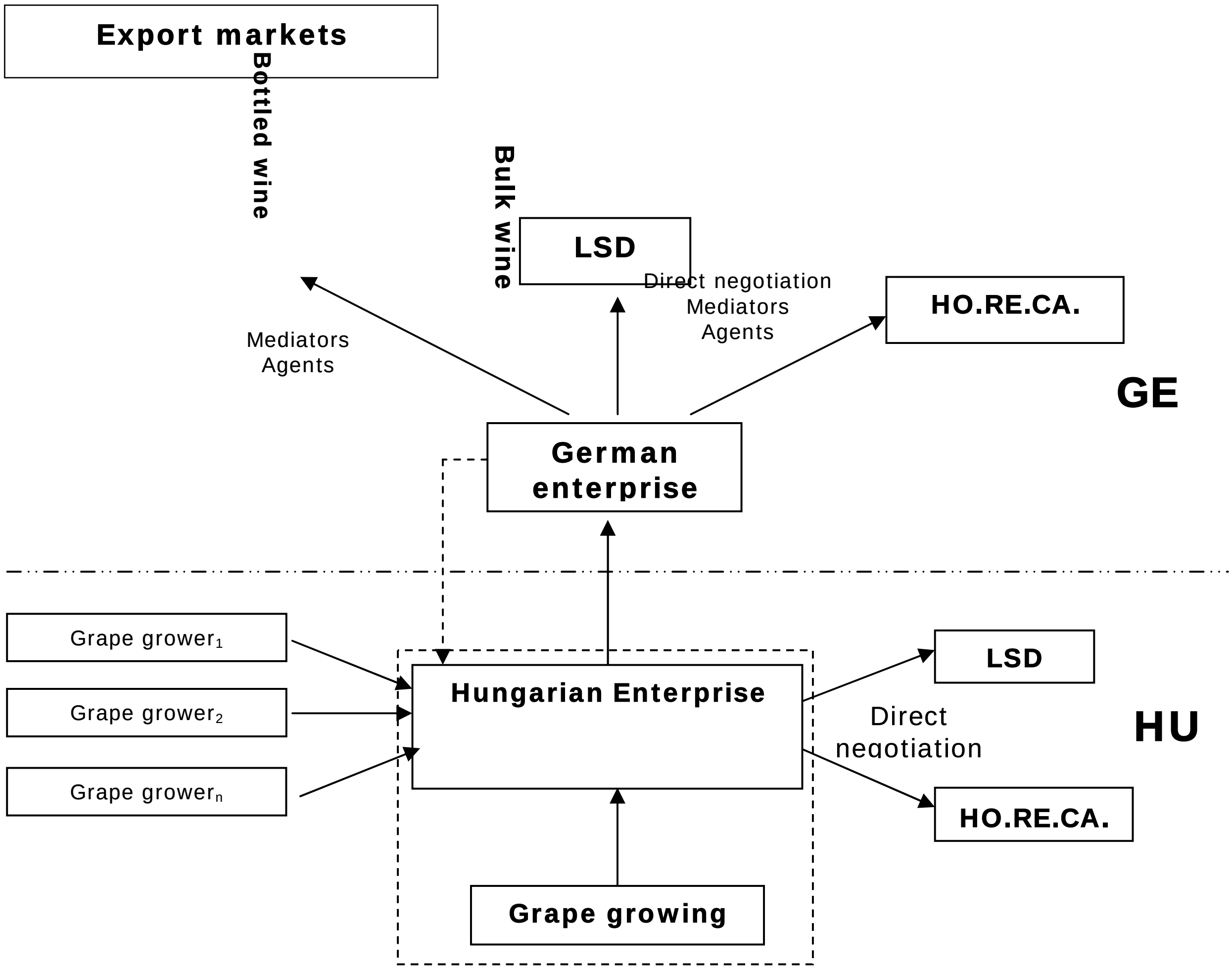


Figure 4: Case (I): a model of vertical coordination of production and distribution

This limited liability company, founded in 1991, is 100% owned by a German wine producer enterprise. This firm purchased a cellar of a State firm during privatization in the Mátra region. They founded an estate, a new investment in Tolna region in order to assure the raw material for red wines, while they produced grapes for white wines in the Mátra region.

The Hungarian enterprise assures a share of the grape supply with integrated grape growing on 316 ha of vineyard (276 ha in Mátra and 40 ha in Tolna). This surface is rented from the Hungarian state with long term lease contract. Grape production is complemented by purchasing grapes from regional grape growers based on a long term partnership agreement. This agreement is a declaration of coordination intention for 5 years complemented by annual exchange contracts on grapes.

In addition to grape growing and purchase, the Hungarian enterprise produces bulk wine that is "exported" to the German parent enterprise that deals with bottling of bulk wine, distribution in Germany and on other export markets and sends back bottled wines to Hungary. On the Hungarian market, which plays only a marginal role for the limited liability company, the company deals with the distribution (of bottled wines).

In this case the German parent enterprise assumes the essential organization of distribution on the export markets of wines produced by the Hungarian Ltd. Consequently the Hungarian enterprise profits from the marketing relationships of the foreign owner company.

2. Case (II)

The second examined case is the one concerning the most important wine and sparkling wine producer society in Hungary. By controlling 90% of the Hungarian sparkling wine production, this company occupies the first place in Hungarian wine production, and bottled wine distribution on the domestic market. It is one of the most important actors of the Hungarian wine export as well.

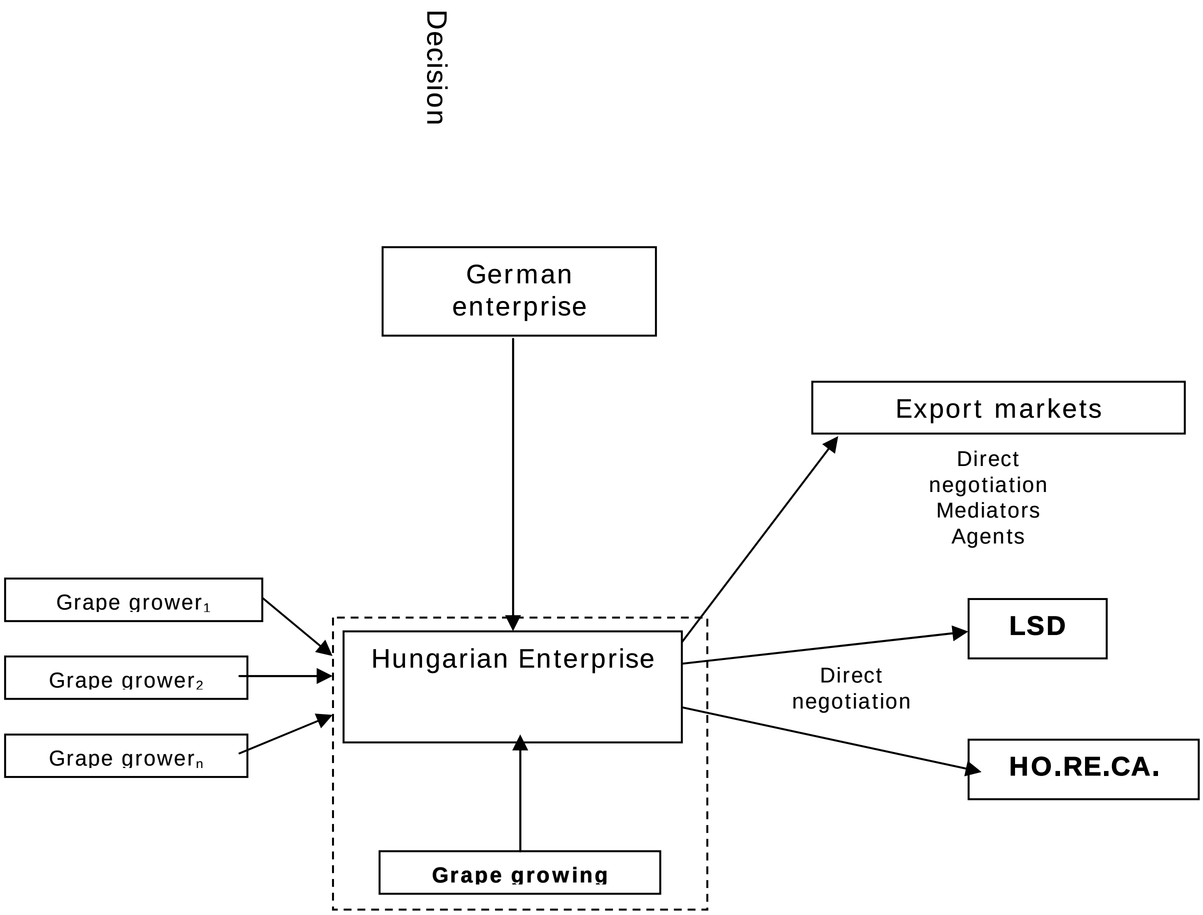


Figure 5: Model of vertical coordination of production and distribution in Case (II)

During the privatisation in 1992, a German company, one of the greatest European sparkling wine producer society, bought an Hungarian enterprise and its cellars, which was a large state company at that time. The group of companies was renamed in 2005.

The society assures the majority of its grape supply with control of nearly 900 ha of vineyard in several Hungarian wine growing regions. These plots are rented from the Hungarian state by a long term lease contract. Raw material supply is complemented by a long term agreement for grape purchase with regional grape growers represented by a declaration of coordination intention for 5 years completed by annual exchange contracts on grapes as well as by grape purchases on the spot market, depending on the purpose of the final production position on the consumer market.

The coordination of grapes supply is ensured through a new co. controlled by ex managers of the State company (that also has a minority share into it). The new co. governs a complex network composed of bilateral grapes supply contracts under the umbrella of a long term framework contract, which establishes production rules, exclusivity constraints and minimum guaranteed price for a number of years. Most often such contract is signed by the grape-grower with the new co. (the coordination company), that is in turn contractually obliged *vis à vis* the ex state-owned company. In a minority set of cases a multilateral framework agreement is signed between the ex state-owned company, the new co. and the grape-grower.

This model is also interesting in a more larger perspective. Indeed, the German company controls a larger set of wine companies located in various European states. This is an example of European group where coordination is attained through a mix of decentralization of production and distribution strategies at local level and a coordination of exports favoring the use of commercial channels developed locally in the interest of the whole group.

3. Case of foreign estates in the Tokaj appellation

In the Tokaj wine appellation several foreign societies (p.ex. AXA, GAN, GMF, Vega Sicilia) purchased cellars of the formerly a State-owned Tokaji enterprise during privatization in the early 1990s. The State firm was split into several enterprises: the most valuable cellars were sold to foreign investors, the rest of the company remained in State property.

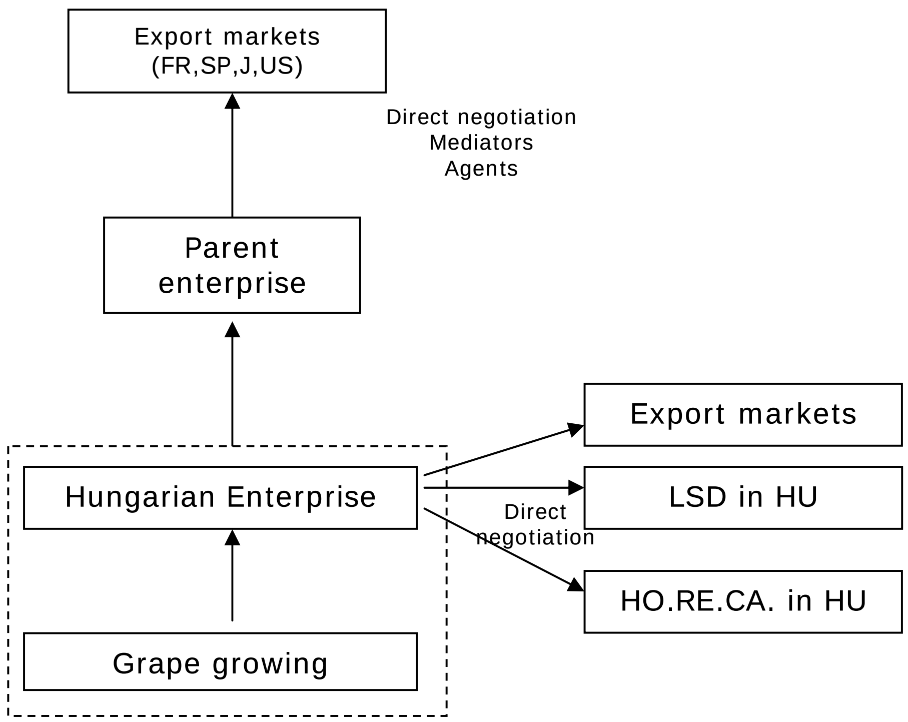


Figure 6: Model of vertical coordination of production and distribution in case of enterprises in foreign property in the Tokaj appellation

The foreign owned firms possess their own vineyards as well (mainly rented from the Hungarian State), so they can entirely control the quality of raw material. They purchase only “aszú” berries for the most valuable Tokaj wine specialty called “Tokaji aszú” in order to complete their own aszú berry production.

These enterprises at the time of installation in Hungary, invested huge amount of funds in the quality reconversion of vineyards and created new plantations as well. They upgraded cellars, created new buildings, employed new grape transformation and oenological technology. Among them many were so called “greenfield site” investments (such as Disznókő or Oremus Ltd.).

In addition to financing investments, parent enterprises offer their distribution network on certain export markets (e.g. in France, Spain, US, Japan) and the Hungarian subsidiary can profit from the market relationships of the owner society in addition to finding new export markets. However the pressure for export is not as strong as that of similar Hungarian owned enterprises. The latter societies are specialized at “niche” or luxury products and target mainly export markets in addition to distribution on the domestic market where they position their products in the HO.RE.CA. and in the hyper- and supermarkets as well.

Overall we can conclude that Hungarian enterprises owned by foreigners follow the integrated model of producing wine by controlling the entire process from grape growing to the distribution.

2.2. Emergence of long term relationships

Considering the production chain in the Hungarian wine industry, we can observe the increasing importance of long term relationships which involve a higher degree of collaboration with parties exchanging grapes more than bulk wine and undertaking high quality production projects.

In Hungary, in general, the grape market is more important than bulk wine market for quality wine production. On the one hand grape production is highly fragmented and cooperatives formed by grape growers making and selling bulk wine make up a minority of producers. Cooperatives as a form of enterprise are not prevalent in the Hungarian wine sector. On the other hand the wineries prefer buying grapes as raw material, because it is easier to control the quality of grapes (viticulture techniques, plant protection, state of health of harvest, ripeness, intrinsic value etc.) than the quality of bulk wine. Therefore, when a winery targets the high quality, premium wine market segment, it chooses buying grapes rather than bulk wine. Recently creating a firm’s own vineyard in order to control grape and wine quality entirely is becoming more and more important. This trend means that enterprises increasingly buy bulk wine for completing their product assortment in a case limited to specific varieties or for products destined to cheaper wine categories.

Contractual long term relationships are relatively rare at the production and distribution level. Some wineries apply this supply system, but we can speak about rather a medium (3 years) or a long term (5 years) declaration of intention of collaboration than a real contract, because - in most of the cases – elements guaranteeing execution are missing from this agreement. Obviously this leads to a high risk of opportunistic behaviour of parties. There is not enough motivation for execution in the agreements. Consequently long term relationships are not based on contracts, but rather on confidence, trust and familiarity. Loyalty is more important for certain wineries than a long term contract. Wineries possess a mainly stable supplier circle: the majority of suppliers are permanent, with mild fluctuation among the rest of suppliers.

2.3. Contractual rules in production contracts

The *table 1* summarizes the contractual rules observed in the production contracts.

Fresh grape market is dominant among raw material markets due to fragmented grape production structure, integrated transformation and vinification structure and the insignificant number of cooperatives in the Hungarian wine industry. Bulk wine market plays a marginal role because of the difficulty of quality control. Consequently wineries purchase grapes rather than bulk wine (or create their own vineyard) that drives to the regression of the bulk wine market.

Grapes are sold mainly on the spot market with oral agreement or exchange contract (agreed during vintage period) on the basis of the spot market. We can find long term, written, but not highly detailed agreements in some cases, mainly in the case of large wineries without enough vineyards to assure their grape supply. These agreements are not real long term contracts; but rather declarations of intention of long term collaboration. These agreements do not define strategic coordination elements of collaboration, guarantee system, risk sharing or price definition (e. g. purchasing price indexation). As a result they are complemented by yearly exchange contracts based on the spot market price of vintage period. We found an example of a large winery, where the long term relationship for purchasing quality raw material (grapes) is based on confidence and loyalty. The winery works with yearly exchange contracts (agreed during vintage period) but it offers higher price for suppliers than the spot market price of vintage. Another winery has no long term contract, but it makes an agreement with grape growers on grape purchasing long before vintage (generally during spring).

Table 1: Characteristics of production contracts in the Hungarian wine industry

	Sale of grapes	***Sale of bulk wine****
Legal form (in writing and highly detailed, totally oral, orders in writing only including price, quantity, type of goods)	- Marginally written agreements but not highly detailed (intention of coordination) completed by yearly sale contract on the basis of spot market, including price, quantity and type of goods or oral agreement - Mainly sale contract (on the prompt market)	- Mainly sale contract on the prompt market or oral agreement
Stability (in terms of duration and/or renewal policy)	Marginally – In case of agreements: 3 or 5 years coordination but without guarantee of purchasing during this period – Renewal policy: after 3 or 5 years but both parts can interrupt the renewal of agreement	- Stability is marginal - Mainly not stable, prompt market rules function
Allocation of power (is the main decision power exercised by the seller or the buyer?)	Mainly the buyer exercises the main decision power	- Mainly the buyer exercises the main decision power
Exclusivity	There is no exclusivity in the agreements (if another buyer proposes a higher price, grape grower sells grapes despite of signed agreement), high risk of opportunist behavior	There is no exclusivity in the agreements
Employ of "mediators" to match offer and demand	- Never (mediator does not exist in Hungary in case of grape): the buyer wineries organize the producers or the grape producers contact wineries directly	- marginal (bulk wine mediators have a marginal role in the Hungarian wine industry)

*N.b. In Hungary the bulk wine market is more and more restraint, because of the difficulty of quality control. Therefore enterprises purchase grapes rather than bulk wine. Grape market is more important, bulk wine market became marginal

Stability of written contracts is considered relatively marginal. Long term relationships work on the basis of confidence and familiarity. The duration of written long term agreements is typically 3 or 5 years, but they do not include elements guaranteeing execution, therefore these agreements are weak. In spite of the fact that these agreements do not contain clauses for sharing revenues, risks or formulating a collective strategy, the relative marketing safety offers motivation for the contracted grape growers in case of over-production even if the winery offers a low price.

In Hungary, it is generally true that buyers exercise the main decision power. Sellers have weak bargaining power, because grape growers are not well organized – they are too fragmented, their offer is too atomized and variable – for the negotiation with wineries. Therefore the latter has dominant position in the negotiation.

These agreements do not grant exclusivity: if another buyer proposes a higher price for grape grower, he can sell grapes for this latter buyer despite of signed agreement. Consequently they include a high risk of opportunistic behavior of signing parties.

In Hungary, the mediators (grape or wine brokers) like actors in the wine industry do not exist. It happens that a winery or trade company deals with mediator activity of bulk wine, but this is the exception rather than the norm. Direct negotiation is prevalent between winery and grape grower (or sometimes with producer group).

While emphasizing that contractual relationships are relatively rare in the Hungarian wine industry, we have to mention that the contractualization depends on the individual strategy of wineries. It becomes important when the marketing objective of a winery is to obtain high quality grapes and wine because of the positioning of final products. Positioning can be considered different ways: either the final product is positioned in the high price segment of the wine market, or it is positioned in the premium category but on the export markets, where the quality requirements are very demanding for example in the hypermarket chains. Grapes and wines with denominations of origin are important determinants of contractualization in case of certain specialties like „Tokaji wine specialties", „Egri bikavér", „Villányi" denomination, or quality sparkling wines, or „late harvest" products.

3. *Inter-Firm Collaborations in the Distribution*

In the following table, we present the forms of distribution chain in case of Hungary:

Table 2: Structure of the Hungarian wine distribution

	National* *(80% of total sale)*	***International**** *(20% of total sale)*
HO.RE.CA. channel	~15%	marginally (~5%)
Large scale distribution chains	~75%	mainly (~95%)
"Short chains" (sell to consumers)	mainly	mainly
Long chains (sell to retailers)	mainly	mainly
Second-tier distribution chains whose members are short and/or long chains	does not exist	marginally
Direct sale to small surface supermarkets and retailer stores	mainly	-
Direct sale at cellars	~10%	-

*Estimation by professionals; no available statistics concerning wine trade by distribution channels

In Hungary regularly collected and published statistical data on different wine distribution chains do not exist. We can base our analyses on professional estimations and on target market studies made by market research companies[137] (Kiss, 2007), researchers and professional organizations[138].

For the Hungarian wine distribution, the national level has a dominant role that is estimated to 80% regarding total wine sale. International distribution of Hungarian wines represents 20%.

At national level, among the distribution channels HO.RE.CA. means about 15% of total wine sales. The HO.RE.CA. category includes not only the restaurants, bars etc. where higher priced, quality bottled wines are offered, but also the special Hungarian wine bars (pubs) where cheap wines are distributed for regular consumers.

[137] See Kiss, B. (2007): Egyre fontosabbak a modern láncok, AC Nielsen tanulmány (Modern chains are more and more important, AC Nielsen Strudy) *Bor és Piac*, (*Wine and Market*) 2007/1, 38-39. p. and GfK Hungária Piackutató Intézet, Bor feltáró tanulmány (Wine market research), 2008

[138] Interview with National Council of Wine Communities (HNT), Federation of Hungarian Vine- and Wine-growers

Similar to international developments, supermarket chains (LSD) became the most important distribution channels for wines. About 75% of wines are distributed by LSD in Hungary. This distribution channel developed explosively in Hungary after the transition, since the mid-1990s and changed radically the food and drink distribution system in Hungary[139] (*Kisari et Sidlovits, 2004)*.

In general in the Hungarian wine distribution the short chain is prevalent: wineries negotiate directly concerning price, type of product, volume and other supplying conditions with the centre of LSD chains (e.g. Lidl, Tesco, Spar, Auchan, Cora etc.) or they agree with the given store on volume, but on price and other conditions with the centre of the retail store chain (such as in the case of CBA, the biggest Hunarian owned chain). In case of LSD distribution between winery and LSD wholesaler can hardly be found, the most significant example is DuplexDrink Ltd. Other wholesalers that deal with wines are specialised at distribution of foreign wines, and they negotiate with LSD in Hungary in order to offer import wines. Nevertheless bottled import wines play a marginal role in certain LSD stores and function as complementary wine offer to Hungarian wines. In other chains (e.g. Lidl) import wine offer is as important as Hungarian one. In this case the foreign wines mean serious competition for Hungarian bottled wines, mainly in the red quality wine category.

Long channels (cash & carry) like Metro, Interfruct, play also important role in case of wine distribution. These were the first chains that appeared as LSD in the Hungarian market in the mid-1990s.

Table 3: Wine distribution chains in case of HO.RE.CA. and LSD in Hungary

	HO.RE.CA.	**LSD**
Direct sale	mainly	mainly
Sale via "agents"	-	-
Sale via "mediators"	marginally	marginally
Sale to importers who sell to retailers	mainly	mainly
Sale to importers > to distribution companies > to retailers	marginally	marginally
Sale to "cash and carry" (LSD – long chain) > to retailers	mainly	never
Sale to distribution companies owned in partnership with other companies	does not exist	does not exist
Sale to distribution companies controlled by the final producer	marginally	marginally

On the domestic market, we have to mention the importance of direct sale to consumers in the cellars. This activity constitutes about 10% of total wine sales. This channel represents a traditional distribution form of wines among micro-enterprises and individual wine growers (below 80 hl of wine production). These enterprises sell wines at the cellar to local consumers and acquaintances. In case of small family enterprises direct sales is becoming more and more important because of development of wine tourism in several wine appellations (Tokaj, Villány, Eger, around Lake Balaton, Sopron, Szekszárd, Kunság). These domains are ready for reception of tourists and visitors. They offer a wide range of services and programs for visitors: wine tasting, guest-house, restaurant, wellness and recreation services.

Finally, wine distribution models are complemented with wine clubs like Bortársaság ("Wine Society"), where high quality wines and services are offered for a special price for members. We found a new and innovative type of high quality wine distribution model that offers a solution for wine friends – members of a company - to obtain their own micro vineyard by a lease contract (the lease

[139] Kisari I., Sidlovits D. (2004): A magyar élelmiszer kereskedelem bor- és pezsgőválasztéka (*Choice of wine and sparkling wine in the Hungarian retail stores)*, Borászati Füzetek, 2005/1, Magyar Mezőgazdaság – p. 19-23.

contract offers units of vine-stocks, one unit = 10 vine-stocks = 12 bottles of wine) at a celebrated domain in a wine region of high reputation that deals with separate wine making for leaseholder. This wine is bottled and labelled with the name of leaseholder and the trade mark of the company. Slogan of this initiative can be expressed as "Let you have your own wine!". With this initiative the company would like to enlarge the market segment of high quality wines on the Hungarian market.

The observed contracts in the distribution chain in case of Hungarian wineries are summarized in the following table:

Table 4: Contracts in the HO.RE.CA. and LSD sector in the Hungarian wine industry

	HO.RE.CA.	**LSD**
Legal form (in writing and highly detailed, totally oral, orders in writing only including price, quantity, type of goods)	Mainly: oral agreement with orders in writing including price, volume, type of goods Marginally: writing contract	Mainly: in writing and highly detailed
Stability (in terms of duration and/or renewal policy)	Stability mainly for quality wines and in case of restaurants, depending on confidence Pubs: stability is marginal	Marginal
Allocation of power (is the main decision power exercised by the final producer or the distributor?)	More equalized between producer and distributor because it is based on previous relations	SE and ME: decision power is mainly exercised by distributor ME and LE: decision power is more equalized (they can prove price)
Exclusivity (mainly with respect to territory and type of product)	Marginally	Marginally

Size of enterprise: SE = small enterprise; ME = medium enterprise; LE = large enterprise

3.1. Contracts in the HO.RE.CA. sector

In Hungary, contracts in the HO.RE.CA. sector are mainly oral agreements based on long-term acquaintance and relationship. Exchange happens with a simple order including price, volume and type of good. Stability of supply relationship depends on the quality and long-term contact between the winery and HO.RE.CA.. High quality restaurants enjoy a more stable relationship, and confidence plays an essential role in the supply. In case of pubs, wine bars that offer cheap table wines for less discriminating regular consumers, stability is marginal, but existing long-term supplier relationships make a difference in this category as well. The allocation of power between final producer or wholesaler and HO.RE.CA. is more equalized, because wine supply is essentially based on previous relationships and confidence. Exclusivity is not prevalent in these contracts regarding appellations or type of products.

3.2. Contracts with LSD

In case of LSD, in Hungary supplier agreements are highly detailed written contracts. Producers criticize these contracts, because international LSD chains present in Hungary demand several types of contribution from producers including sale, promotion, store opening contribution, "shelf charge" fee etc.. These mean high additional costs for producers. Stability of this supply contract is marginal. If another producer can offer a similar wine for cheaper price in the same category, the LSD lists out the product of the former supplier. Contract renewals require hard negotiation procedures.

According to the declaration of small and certain medium size enterprises the decision power is exercised by LSD chains, they feel their position defenceless against retail chains. Other medium size enterprises and large wineries declare more level of bargaining power with LSDs and they can validate their costs in the price agreement. Practically there is no exclusivity in the contracts regarding type of product or territory. LSDs create strong competition among wine suppliers, however, in most cases, producers contact LSD directly for listing their products. In summary it is not the LSD who is looking for wines, but the producers targeting LSD demand declaring what kind of products they can offer for what price.

In terms of contractual rules, on the one hand LSDs have a dominant position and can largely influence the production chain, on the other hand producers influence wine offer of retail chains, because it is them who offer wines for LSD and not the LSD looking for wines. The logic is not based on the consumer search for types of product; consumers choose from the very large wine offer of retail store. In summary the wine market of LSD can still be described as a "push" market, where the wine supply is determinant instead of wine demand.

In Hungary LSDs, have no special quality requirements, but if there is a serious quality problem with a product, it is listed off from the store. Actually, it is Lidl that demands several requirements especially concerning wine packaging (bottle type, labelling rules, boxes etc.), that requests special investments and large volume of wine from producer for a profitable collaboration.

We can say that both sides affect each other: in production method, packaging, quality, price positioning and private labels. In case of private labels, in general LSDs have no specific rules, they request that producers offer certain products for LSD private labelled wine. In the best case the LSD can tell that it is looking for red or white wine for private label, but not more.

3.3. Determination of distribution of surplus along the chain

Between grape-growers and wineries, in most cases distribution of surplus is determined one sided by the merchant winery, because of the weak bargaining power of grape-growers, of the low differentiation of grape purchase price in spite of the quality development (except in cases of certain icon appellations such as Tokaj, Villány), and because of the price positioning and distribution strategy. So margins are very restrained at the level of grape-growing. The profitability of this activity remains at low level. Therefore, many grape-growers abandon this activity and profit from the grubbing up premium of new wine-CMO (in 2008/2009 demands arrived for grubbing-up 3 300 ha of vineyard). Between the grape-grower and the winery it is the latter that captures margin.

Between wineries and LSD, we observed that LSD has more negotiation power than suppliers (but several medium and large enterprises said that they can negotiate appropriate price), so margins became more and more distributed between winery and LSD. The intensive competition contributes also to this phenomenon.

Between wineries and wholesalers, we can say that generally wholesaler captures the margin.

We observed significant changes in the allocation of power between production and distribution in the last ten years. The negotiation power of LSDs has increased, because the position of LSDs in the wine distribution has become dominant in Hungary (explosive growth of LSDs in the wine distribution in Hungary since 1995). LSDs use several tactics in order to surcharge wine suppliers; however, it has a negative effect on wine quality. In spite of their exposed situation, we cannot observe any case of collaboration between suppliers, final producers, distributors to protect themselves and/or create a better bargaining position; there is no inter-phase collaboration between the different actors of the wine sector. Short-sightedness, distrust and individual interest are dominant factors in the sector and mainly in the wine distribution (*see below the explanation).*

4. *Emergence of Networks*

4.1. Type of networks

We have to emphasize that networks are relatively rare in the Hungarian wine industry, but they exist in certain wine regions. These networks are coordinated by certain wineries. Among the few existing networks we can observe the following types.

Regarding the type of **networks per function** we can distinguish the following:

- **Networks in production** exist in the Hungarian wine industry. This is the prevalent type of networks which includes mainly coordinated grape-growing, coordinated grapes sale, sometimes joint vinification and coordinated bulk wine sale (*see Figure 2)*.

As we see below, these networks are mainly contractual, based on the link among bilateral relations (mostly, grapes' supply contracts). The objective is to ensure compliance with production standards providing grape growers with technical assistance and some guarantee in terms of stability of grapes' sale and/or minimum return.

The leader and coordinator of these networks is normally a relatively bigger enterprise, operating as final producer and engaging in some fiduciary relations with a number of grape-growers. In one case this function is carried on by a separate entity, a new company, established with the scope of coordinating the supply network through a system of bilateral or multilateral framework contracts and a set of linked supply agreements.

These networks are mainly local; in one case, however, an international contractual network has been found, governing a collaboration between an Austrian cooperative, producing Hungarian d.o. wine, and Hungarian grape growers.

Within Hungarian production networks, like in other examined countries in this research, some are oriented to reduce some of the inefficiencies induced by land fragmentation: like in other contexts, the cooperative company model is used for this purpose, although structure and functioning of Hungarian cooperatives are quite peculiar (see below) and their role is much less prominent than in other European countries (see chapter VI on Comparative Analysis). It is interesting to highlight how in some Hungarian cases final producers tend to coordinate some production networks, which are functionally very similar to traditional grape growers' cooperative, using the different form of linked bilateral contracts.

A very unique example of production network is the one of a company offering its members the possibility of purchasing a fix quantity of bottled top quality wine (whose label joins the name of the company and the one of the purchasing member). The wine is produced by highly selected producers who on a contractual basis are requested to comply with specific production standards and are exposed to strict monitoring by the company. The company itself operates as a coordinating entity governing a complex set of contracts with members, with producers and between the two. More specifically it coordinates wine production with selection of domains, offers vine-stock for members, organize their membership, coordinates contract of lease between members and wine-growers, finds new members, manages the uniform appearance of wines like the specific registered bottle shape, as a registered trade mark, and other packaging material, and organizes delivery of wines - labeled with the name of leaseholder – for the member (= leaseholder). In this manner, the company has a complex activity: coordination of production, distribution, service, marketing and advising. More than a solely production network, this is an innovative way of coordination of production *and* distribution.

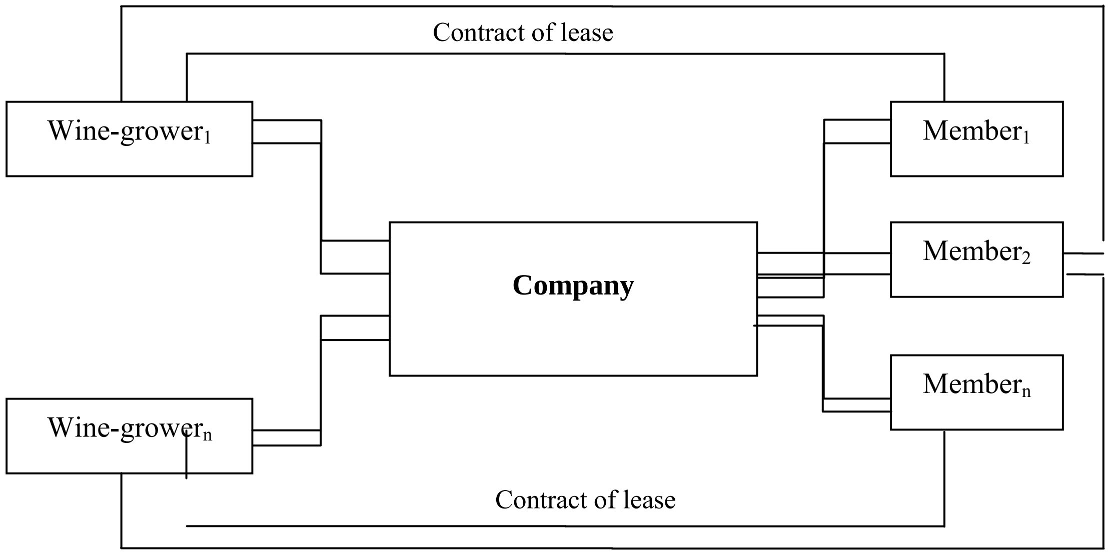


Figure 7: Case of coordination of production and distribution

- **Networks in distribution** like coordinated wine distribution systems, are extremely rare in the domestic market, because wineries negotiate individually and directly with the LSDs (even small businesses). They do not form networks in order to facilitate their negotiation or unite their wine offer or marketing activities.

Export distribution networks do not exist either. There were some initiations to create informal network between exporter wineries on the German or British market, but the opportunistic behavior of collaborators impeded the success of this cooperation. It is found that an exporter company represents several wineries on specific export market (like China) but it is not a real network, it is a food and drink exporter agent.

It is important to mention that in limited cases final producers rather establish their own distribution company, in Hungary and/or abroad, eventually with other local distributors. In one case, the bigger commercial capacity so built has enabled the final producer to establish a contractual network with other smaller producers in order to compose a wider portfolio of Hungarian wines to be traded through its own distribution channels. In a different case, where a big Hungarian producer is part of a bigger European group, being controlled by a German company, the distribution channels developed by and through this Hungarian enterprise are part of a coordinated European distribution system governed through a corporate group rather than through a network.

- **Networks supplying services** where the objective is supplying services related to grape production are a prevalent network type in the Hungarian wine industry. They provide the following tasks:

  - Joint input material purchasing or purchasing with reduced tariff: bottles, chemicals, fertilization etc. In this case the cooperative or the producers' group purchases materials for its members (grape-growers) or it makes an agreement with material suppliers that the members can buy input materials for a special reduced price.

  - Technical support: vintage machine, mechanical works. In this case as well, cooperative or producers' group negotiates with service suppliers and organize services, then grape growers make an order individually with supplier.

- Organization of plant protection advising for grape growers: the same method is used as in the case of technical support.

• **Marketing network:** this network type becomes more and more important in the Hungarian wine industry. Several consortia have been founded recently for collective marketing between two or more wine regions or producer associations in order to obtain European wine marketing subsidy that target the markets of other member states or third countries (CEE regulation of 3/2008) and to achieve Hungarian state subsidy for wine promotion. Other relevant marketing networks have been formed on the field of wine tourism. During the last ten years several associations were established for the coordination and organization of wine tourism, wine fairs for consumers and their promotion such as the "Wine Festival", "Wine Village", Villány-Siklós Wine Route Association, Duna Region Wine Route Association, Tokaj Wine Route Association, Wine Marketing Workshop of Sopron, Hungarian Wine Marketing Association.

Regarding type of **network per legal forms** we can observe the following:

- Set of **bilateral contracts** coordinated for the implementation of a specific project or the satisfaction of a common interest exists mainly for collective marketing projects or research projects. This model is also used for the coordination of production as shown with reference to production networks above.
- We can observe **multilateral contracts** in case of consortia for collective marketing projects or research projects concerning viticulture, terroirs, varieties or oenology. However, informal networks are prevalent in case of the few existing multilateral coordination. A unique case of multilateral framework contracts has been observed and shown with reference to production networks above.
- **Co-operative company:** producers' groups (mostly but not necessarily organized as cooperative companies) are relatively rare in the Hungarian wine industry despite the fragmented grape and wine-growing. Actually, only 11 producers' groups are recognised in the Hungarian wine sector that covers 5 200 ha of vineyard (6% of the total vine surface of Hungary).

Two types of grape-growers' cooperative companies operating in the wine sector can be observed in Hungary. One in which the company is established to supply grapes for a single pre-determined buyer, who is interested in this type of coordination among his/her suppliers. Here the buyer normally plays an important role in the governance of the cooperative. A second type of cooperative is establishe without a specific link with a single buyer and aims at organising grapes production to be sold on the market so gaining some advantages in terms of scale economies. In fact, due to lack of finance, capitalisation, machineries, advanced competencies, these cooperatives fail to provide members with adequate commercial opportunities and face an adverse selection problem, since, being absent a duty of total grape conferment, members may deliver sub-optimal production while autonomously selling better quality grapes on the market. A different attempt towards industrialisation has been done, also thanks to public aid, by a group of three cooperatives establishing a for-profit company due to provide bottling facilities and other services. In fact, the project has never brought the expected result, mainly for insufficient capitalisation.

• **For profit organization** (lucrative company or others): one examples has been shown as an evolution of the cooperative company model and an attempt to carry on a coordinated project among three cooperatives (see here above). In fact the company is today controlled by owners different from cooperative companies and in particular operating as distributor. Thanks to new capitalization and new competences, this change in the ownership structure (that cannot be defined as network anymore) has allowed to more adequately pursue growth strategies towards industrialization and development of commercial channels.

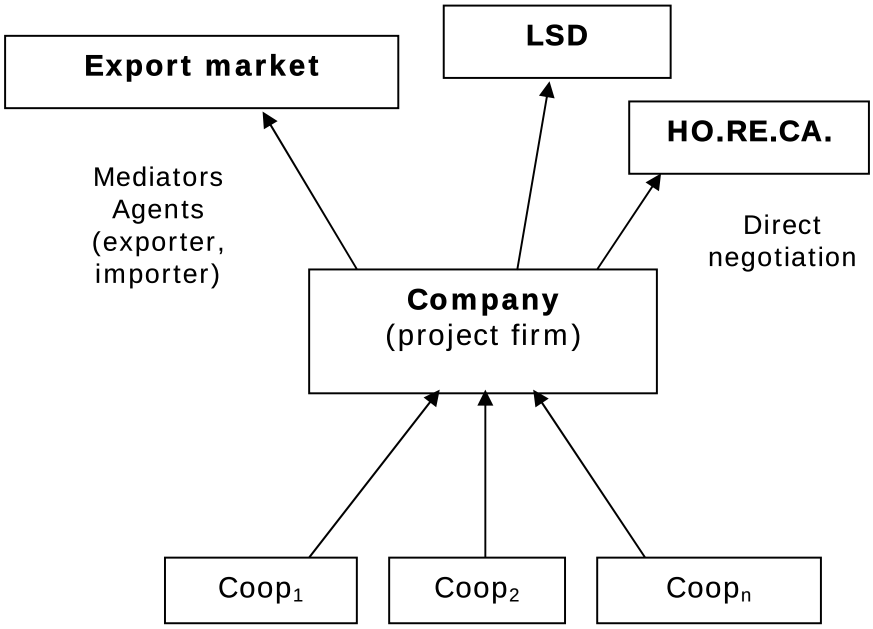


Figure 8: Network created by cooperatives

- **Non-profit organization** (association, foundation, etc.):
  - The most important association is the *Wine Community* organization at production level that is a public body and a special association with compulsory membership of grape-growers, wine-growers and wineries. It is the inter-branch organization that represents the interest of the Hungarian wine sector
  - *Federation of Hungarian Wine-growers* is an association of the most important wineries (wine producers and exporters) of Hungary
  - Wine-growers' associations, e..g. *Pannon Wine-growers' Corporation*, *Vindependent*, *Tokaj Renaissance*
  - Wine marketing associations at regional (ex. Sopron, Szekszárd, Tokaj, Eger) and national level (*Hungarian Wine Marketing Association*).
  - Oenotourism associations at regional (ex. Villány, Duna region, Balaton, Tokaj) and national level (*Association of Hungarian Wine Routes*).

4.2. Describing networks

We demonstrated that networks are formed rarely and mainly informally in the wine production and distribution in Hungary. With the exception of a some examples (mainly along the production chain), they focus on marketing, research programs and representation of interest of certain groups of wine-growers. During our research we have found several explanatory factors for the rare presence of networks and reticence from their creation in the Hungarian wine industry:

- Bad memories of cooperation during the communist era: after 40 years of communism, forced membership, working of socialist cooperatives (otherwise, at that time they were relatively efficient organizations of agriculture and food production coordination) and bad memories of collective property, grape and wine-growers preferred private ownership, independent decision making even if this production structure is less efficient and less profitable (and even it is a visibly irrational decision for the organization of grape and wine production);

- Production organization and property structure as a heritage of privatization:
  - The integrated wine domains in foreign and in Hungarian property formed during privatization are not prone to the creation of networks at production and distribution level. They rather form associations in order to further their interests.
  - Wineries without covering their total grape supply – except some example – do not motivate grape-growers to create co-operations and networks, because they can take advantage of the fragmented grape growing structure and low level of bargaining power of grape-growers (and can force prices down).
- Lack of capital of the actors in the wine sector: It is a huge problem to create cooperatives at the level of wine production and creation of co-operative cellars, while cellar investments require lots of capital, credit and profitable activity (volume and market);
- Mistrust and non-confidence between actors hinder the creation of networks. Grape and wine-growers are very attached to their property; whenever the possibility of a collaboration arises the actors are preoccupied with the fear that the collaborator partner might have an advantage over them at their expense;
- Opportunistic behavior coming from the most widespread strategy of short–term thinking. The actors search for the better price and do not hesitate to break their word (oral agreement) for short-term advantages;
- Neglecting contracts is the consequence of the opportunistic behavior and of the fact that there is not enough motivation for making and no real sanctions against breaking contracts.

4.2.1. Legal form: coordinated bilateral contract

Coordinated bilateral contracts in networks are rare in the Hungarian wine industry but they do exist and represent one of the main type of production networks.

A unique example has been shown above for the coordination of wine production and distribution network realized by bilateral contracts (see above). Here duration of contracts is characterized by long term relationship with wine-growers and membership relation with leaseholders. Between leaseholder and wine-grower, duration of contract of lease means 10 years. Exit rules: if the member does not pay yearly fee, he is excluded. Yearly member's fee covers grape-growing, vinification, bottling and delivery costs for a year. Allocation of power is equalized between partners. Exclusivity appears between the company and wine grower of a specific appellation. The company chooses only one partner (domain) in a given wine appellation or by specific wines for the production agreement and offers his vineyard (unit of vine-stocks) for members (potential leaseholders) and for wines labelled under the company's trademark. Naturally, wine-growers (domains) can produce their own products and distribute them with their own labels.

4.2.2. Legal form: multilateral contract

Goals and purposes pursued of multilateral contracts are collective marketing programs, research project and wine tourism programs. Activity linked to the collaboration are marketing actions on the domestic, EU and third countries market, research and examinations e.g. variety and "terroir" interaction, exploitation of production potential, introduction of new technologies in viticulture and vinification. Duration of contract depends on the period of subsidy finance (3-5 years). Regarding the allocation of power we can observe that partners are mainly institutions, wineries and associations with equalized power in the network. Generally they form a consortium for a specific project. There is no exclusivity in these contracts. It is natural that a new subsidy cannot be obtained with the same topic during the project period. Informal networks are prevalent, and the EU and national subsidies mean certain motivation to create networks.

4.2.3. *Legal form: co-operative and for profit companies*

While few cooperatives have been found and examined, in the for profit category we observed only one example.

If compared with other European members states, the Hungarian cooperative company model is characterized by lower capitalization and lower propension towards industrialization and development of commercial activity. In fact the lack of capital seems a pivotal obstacle as regards any attempt of industrialization. A relatively higher integration between property and control appears in the Hungarian cases as compared with other examined areas in this research (directors are normally members) and a total conferment constraint does not characterize examined cases.

4.2.4. *Legal form: non profit organization*

It is the prevalent type of networks in the Hungarian wine industry; we observed several types of nonprofit organizations. Their goals and purposes pursued are production and market organization, realized particularly by the Wine Community organization, collective marketing, wine tourism and research projects. Their activities cover market organization, collective marketing actions, development of wine tourism services, research and advising. Duration of collaboration depends on the goals and activities. It can be limited for a project, when duration depends on the period of subsidy finance. In case of associations or wine communities the duration extends to long term (an indeterminate period). Regarding the allocation of power we can say that partners are the actors of wine sector and associations that means equalized power of negotiation in the networks or in certain cases their power depends on their share of property (like *Hungarian Wine Marketing* non profit organization). There is no exclusivity in case of this network. Among the other features we have to emphasize the legal obligation in case of the Wine Community organization as special association for production coordination and market regulation with compulsory membership. It is a law, the Wine Community Act (Law of CII of 1994) that created this professional organization and it functions as a public body.

4.3. Networks and the role of cooperatives

4.3.1. *Networks and role of cooperatives*

Cooperative company networks are not widely present in the Hungarian wine sector. Its explanation is detailed under section IV.2. point: bad memories of communist co-operatives and collective property, property structure heritage of privatization, the lack of capital in the viticulture, mistrust and opportunistic behavior between actors.

The so called 'project firm', created by co-operatives in the form of for-profit company, is linked to a particular economic context. It was established in order to avoid an exposed situation against other wineries in the region, and to achieve special credit finance possibility and access state aids. This firm was founded for grape transformation, vinification, bottling and marketing but because of financial problems, actually it run into severe difficulties. The credit with state guarantee has become too expensive. Furthermore, the new company was not able to develop the market of their products that required also huge investments during the available time period that was determined by credit repayment terms.

4.3.2 *Co-operative growth patterns: comparing contractual and organizational*

Formation of cooperatives is relatively rare in the Hungarian wine industry (see in section IV.1.2. Actually, 11 co-operatives are recognized as producers' group function in the wine industry, mainly they are organized around grape transformer wineries. Mergers among each other do not exist. The association of cooperatives exists in order to be eligible for benefits determined by government regulations and to create project firms as required by eligibility criteria for government funds. Cooperatives do not form corporate groups, they create project firms with other external investor(s). They rarely or never merge with private companies (not-cooperative companies). We can observe one example in Hungary of creation of a network company composed of 3 grape grower co-operatives (see above on this case and its final failure):

4.3.3. Emergence of network-like forms and inter-firm co-operations

Among the influencing factors of dynamics, where the o*wnership of the firm* influence the emergence of network with different ways:

- More dispersed property does not lead to cooperation or networks in Hungary. The enterprises strive for integrate grape growing and control the quality of raw material. Rather than networks they form integrated domains, but they participate in supply service networks or marketing networks of wine tourism;
- Some enterprises (wineries) coordinate grape growers, who form producer organizations (producers' group) in order to supply merchants, and apply long term agreements;
- In spite of extremely dispersed property in the Hungarian wine sector, there are only few co-operatives (it covers only 6% of total vine surface).

Regarding *governance structure* in Hungary, the circles of management and enterprise owners are very closed. It does not influence either positively or negatively the formation of networks. In case of foreign property, the enterprise takes part in the owner company's network and profits from marketing relationships of its owner company. They participate at local collective marketing associations or initiate supplying collaboration (e.g. collective purchase of bottles), but they do not create other production or distribution network. They strive for full integration of their activities.

Financial constraints have different interpretation in influence of networks. In Hungary, lack of capital hampers co-operation, but in certain wine regions (e.g. Izsák sub-region of Kunság), it was the motivation to create co-operative. Even the strong competitiveness on the export and domestic markets there is not enough motivation for creating networks at production and distribution level.

Circulation of property rights on land has a strong reaction in emergence of networks. Difficulties in purchasing new land and enlarging one's possession influence negatively the creation of networks. Owners of winery try to form their own vineyard with land purchasing or long time rent without forming networks with grape growers. It is difficult to buy or change fragmented parcels in spite of higher price offered, because land owners are very attached to their small parcels. In Hungary after the EU accession, foreigners (not Hungarian citizens or residents) have no right to purchase land during 7 years (until 2011), so they are not able to obtain land property that blocks the entry of further foreign capital and giving a new dynamism to the wine industry.

Among the *economic factors* we have to mention the increasing global competitiveness that– until now - did not induce propensity to form networks in the Hungarian wine industry. Even in this context, the actors of the wine sector keep away from co-operation or networks, they become more individualistic (creating domains), or many little grape-growers abandon viticulture and grub-up their vineyard. Actually, there are fewer co-operatives than 5 years ago, they suffer from financial problems and several of them had been dissolved because of the disappearance of several great wineries that played an important role of grape purchasing and transformation. Some local and intra-regional networks formed with the objective of collective marketing and wine tourism in order to attract consumers.

In the chapter 4.2., we have already analyzed the *ownership structure after privatization* that influence negatively co-operation.

We have to emphasize the weight of *state and European subsidies* in the emergence of intra-firm collaboration that influence positively the co-operatation, but do not provide a sufficient incentive to form networks due to dispersed grape growing structure. Subsidy for administrative costs that covers 5 years with a respective contribution of 5%-5%-4%-3%-2% and some additional “scores” in the evaluation of aid eligibility according to the agricultural and rural development subsidy programs do not mean enough motivation for the creation of cooperatives, producers’ groups or networks. In Hungary, a global supporting concept of co-operation is missing: cooperatives and producers’ groups do not receive tax benefits, or higher level of subsidy for qualitative restructuring or technical investments etc. Without this type of facility, the proliferation of co-operatives is not expected.

5. International Dimension

Concerning the *impact of international orientation of production on the production and distribution chain* we observed that if the final (export) market demands high quality, the enterprise strives for the integration of production and distribution as well. International orientation, however, does not lead to the formation of more networks at the production level in Hungary; actors prefer vertical integration. Enterprises try to find markets individually with their exporter or importer partners, but the foreign owned enterprises can also profit from the distribution network of their parent companies.

Dependence on the international final market is not characteristic in the Hungarian wine sector. However, internationalisation generates specific type of networks e.g. partnerships among final producers to access new markets, if the producers together can obtain state or European subsidy for wine promotion. For example in 2007 some final producers of Villány and Tokaj region created a consortium, in order to obtain European subsidy (according to the regulation of CEE 3/2008) and carry out a wine promotional project in the American market. These types of consortiums are limited to certain actions, they are not long term networks and they are created for a specific project.

The international orientation of Hungarian actors does not increase the incentive to choose alternative models (e.g. corporate groups) but for legal reasons, for example in the US, some producers have incentives to buy shares in local distribution companies or to create new ones to obtain control over the distribution chain.

We have to underline that generally the networks formed because of international factors are not prevalent in the Hungarian wine sector. They are weakly developed, focusing at collective marketing programs. Foreign owned enterprises, however, can profit from the network of the owner companies.

5.1. Comparing national and international contracts

When we compare national and international cooperation in distribution, we focus on contracts between producer and retail chains. We summarize the results in the following table:

Table 5 : Comparison of national and international contracts of the Hungarian wine producers

	NATIONAL CONTRACTS	**INTERNATIONAL CONTRACTS**
Legal form (in writing and highly detailed, totally oral, orders in writing only including price, quantity, type of goods)	Mainly: in writing and highly detailed with high requirements of listing and delivery	Mainly: in writing and highly detailed with high requirements of listing, products delivery (e.g. Polish, Slovakian, Czech market) and quality (e.g. German market) Marginally: orders in writing including price, quality, type of goods but in order to entry, producer has to fulfil the very high quality and quality control requirements (e.g. British market)
Stability (in terms of duration and/or renewal policy)	Marginal	Marginal in general, but because of confidence, long term relationships can be formed on certain markets (e.g. German, Polish, British market)
Allocation of power (is the main decision-making power exercised by grapes producers, wine producers, distributors? Please, rank them)	SE and ME*: decision power is mainly exercised by distributor ME and LE*: decision power is more equalized (they can prove price)	ME and LE*: decision power is more equalized (they can prove price), but they confirm distributors have more power
Exclusivity	Marginal	more frequent

*Size of enterprise: SE = small enterprise; ME = medium enterprise; LE = large enterprise

Hungarian wineries focusing on export markets confirm that the supply contract policy of international retail chains (e.g. Tesco, Lidl etc.) in the formerly communist countries (e.g. Poland, Slovakia) is similar to their policy for the Hungarian market. These supply contracts are highly detailed, especially regarding requirements linked to the entry (listing) of products to the retail chain (different type of charges) or to delivery and packaging demands. On the German market beside of these latter requests, high quality requirements and favourable price and value ratio appear as a demand in the retail chains. On the British market, quality and quality control systems represent bottlenecks for entering a retail chain (e.g. Sainsbury, Marks&Spencer). If the producer and distributor trust each other, the contract is limited to orders in writing only including price, quantity and type of goods.

In general, neither national nor international relationships with retail chains are considered stable relations, because of the increasing competitiveness and increasing wine offer on the world wine market. We can observe the same uncertainty in the national and international contracts. However, signs of stability manifest when confidence has been established between producer and retail chains.

Regarding the allocation of power between wine-producers and distributors, actors of the Hungarian wine sector have different opinion on national and international contracts. Small and certain medium size enterprises complain about the dominant position of distributors (LSDs) on the Hungarian wine market and meet with decision power mainly exercised by distributors, while other medium size wineries and large enterprises consider that decision power is rather equalized and they can validate their price in the negotiation with LSDs. The most important wine exporter enterprises – medium and large scale wineries – find that decision power is more equalized in the international contracts, they can assert their prices, but even they confirm distributors have more power than wine producers.

In the following table we summarized the types of distribution chains in the national and international context:

Table 6 : Comparison of distribution chains of Hungarian wines in national and international context

	NATIONAL CONTEXT	INTERNATIONAL CONTEXT
Direct sale	mainly	marginally
Sale via "agents"	never	marginally
Sale via "mediators"	marginal	mainly
Sale to importers who sell to retailers	mainly	mainly
Sale to importers > to distribution companies > to retailers	-	mainly
Sale to "cash and carry" (LSD – long chain) > to retailers	mainly	mainly
Sale to distribution companies owned in partnership with other companies	-	marginally
Sale to distribution companies controlled by the final producer	never	never

We have to highlight differences between two markets: On the national level direct sale between wine producer and LSDs is dominant and "cash and carry" plays also an important role in the wine distribution in Hungary. Sale via mediators is uncharacteristic – wholesalers play a marginal role. Wine distribution chain is considered quite short in Hungary. Imported wines arrive via importers to the retail chains. Other distribution forms do not exist on the national level.

In the international context, distribution chains are longer, wine distribution is realized mainly via mediators, importers and "cash and carry" chains. Direct sale and sale via agents plays an insignificant role in the Hungarian wine distribution on the export markets.

We have to underline that international networks of Hungarian wine enterprises do not exist, so we cannot compare national and international forms of networks.

6. Conclusion

Our analysis shows that the inter-firm networks have a very limited use in the Hungarian wine industry. Some inter-firm collaborations emerge in the production chain particularly in the grape-growing, in the grape-growing supply system and wine-making. We can find some rare examples for emergence of networks in the oenological research, wine marketing and oenotourism in order to obtain subsidies. The cooperative system – despite the fragmented vineyard ownership structure and grape-growing – has no significant role in the Hungarian wine industry. At the international level networks are even more limited in the production and distribution chain than at the national level.

The inter-firm collaborations evolved are rather linked to the ownership structure formed after the land, vineyard and winery privatization. Wineries that do not dispose enough vineyards for their grape-vine supply created their networks with the grape-growers while they are dependent on producers in order to assure their raw material needs considering volume and quality. We have to highlight, however, some modification regarding these enterprises, because they have changed in the last ten years in terms of number and size. We observe a decrease of 20% because of abandoning activity among micro-enterprises and individual wine-growers. The most important enterprises remained stable until 2008, but in 2008 three large enterprises that had played an important role in the coordination of grape production, declared bankruptcy. They were among the most important quality wine-producers of the Hungarian wine industry.

We have to underline as well that increasing competitiveness has an opposite effect on cooperation. We can observe evolving of integrated wineries. Instead of cooperation, the vertically integrated forms are expanding in the Hungarian wine industry.

The allocation of power along the value chain linked to the relations between production and distribution reinforces also the integrated models and influences the contractual relationships between grape-growers and wineries. Distribution chain has more and more negotiation power that influences the whole vertical chain. Raw material (grape) prices rest less differentiated, there is no sufficient coordination and efficient long term contracts between grape producers and wineries. The consequence is that price fluctuation rises and stability is reduced. The governance structure of the supply chain is very close to the spot market that - in spite of the quality development in grape growing – leads to a decrease of global value. Wineries (merchants) and mediators capture margin in this structure. Creation of value and its redistribution does not get back to grape growers, which leads to the low profitability of viticulture.

The professional organizations and the inter-branch type organizations (wine community organizations) have an important role in creating opportunities for collaboration of different actors of the Hungarian wine industry.

Chapter VI
Inter-firm Networks in the European Wine Industry: A Comparative Analysis

by F. Cafaggi and P. Iamiceli

1. *Market-Type Relations, Strategic Relations and the Emergence of Networks in the Wine Industry: Network Islands in a Market Aea.*

The research compares different production and distribution chains in the European wine sector, observing in particular the levels of vertical and horizontal integration through contracts and networks.

More specifically, we analyse:

- whether and to what extent enterprises use networks as instruments to govern the wine supply chain;
- at which level of the chain networks tend to be formed, and why;
- who are the main actors promoting the networks along the chain (particularly: producers or distributors, small or medium enterprises);
- what are the main cross-country differences in forming networks and the main elements explaining these differences.

In relation to contracting practices we focus in particular on the following questions:

- whether and to what extent collaboration practices take place within grapes and bulk wine transactions, or whether these simply amount to market-type relations;
- how enterprises choose between more stable relations and spot purchases, and whether, in the former case, they tend to formalise the relation using written and more detailed contracts;
- whether these collaborations are influenced by product quality regulation, with special regards to regulation concerning the use of denominations of origin and geographical indications.

1.1. Market type relations

The research shows that in the observed areas **market-type relations** prevail over strategic collaborative relations. In particular, spot market relations concern bulk wine more than grapes sales, and are more frequent in the low to medium price segment than in the high price segment.

The importance and the characteristics of market-type relations vary from case to case, mostly depending on the level of fragmentation of enterprises at the different stages of the production and distribution chain. The more fragmented the group of potential sellers as compared to potential buyers (which is normally the case), the more prone the buyer is to rely on the spot market in order to complete its offer and to extract possible rents from the relatively easy availability of concurrent offers on the market.

1.2. Strategic relations

Conversely, relatively more **strategic relations** are observed when small to medium-sized enterprises converge to a prominent inclination to growth strategies based on the adoption of high quality projects, a wider diversification of products, prompt responses to market changes, trademark development, internationalisation of products, and chain governance. These features have been observed more frequently in north east Italy, France and partially Portugal. Strategic relations emerge in the Valencian area as well, though to a more limited extent. The current stage of the re-building process taking place in Hungary does not yet allow a clearly identifiable evolution in this direction, although a few enterprises, characterised for being more dynamic and internationally oriented, have started relying on strategic relations with grapes and wine suppliers to pursue development strategies and the production of higher quality wines.

Where strategic relations emerge, they tend to be characterised by a different level of formalisation: higher in the Loire and in the Italian areas; lower in Douro and in Valencia. In the former cases the use of written contracts, in addition to being induced by legal constraints (as is the case in France, but not in Italy), reflects the need to specify quality and technical characteristics, and to enable planning and monitoring processes, which are often implemented throughout the several production phases and include less formalised collaboration practices.

The research investigates whether the presence and role of strategic relations along the productive and distribution chain (mainly the former) can be associated with the role of protected denominations of origin and geographical indications in the aforementioned countries. **It asks whether there is a correlation between the regulatory framework and the governance structure.**

Although important in all of these countries, the expansion of d.o./g.i. wines in Hungary and Spain is much more recent than in France, Italy and Portugal. In particular, in Hungary a 10% increase in d.o. production has been registered in the last ten years, and a major movement towards the promotion of territory as key element of development strategies is endorsed by the national government, the main trade organisations and many enterprises. Portugal, and the Douro region in particular, is a peculiar case, as it is currently pushing for a brand-based development strategy, but still coupled with strong ties to regional production.

Different perspectives arise in terms of development strategies. While, in the context of the Hungarian re-building process, the focus on territory represents one of the main drivers for developing or consolidating the reputation of regional wines, in the context of more consolidated markets, like France and Italy, other elements are considered: first, the capacity for building strong trademarks; second (though much less frequently), the value of grape variety per se. From the perspective of traditional producing countries, brand-oriented strategies are particularly important at the international level, and to access emerging markets.

The research shows that inter-firm collaboration may play a relevant role in pursuing these goals, fostering reputation-enhancing mechanisms. While in more consolidated markets several examples of strategic relations help to support this hypothesis positively both in the area of territory-oriented growth strategies, and in the case of those which are brand-oriented, Hungarian enterprises tend to rely on inter-firm collaboration to a lesser extent, often being discouraged by monitoring costs.

1.3. The emergence of networks

The formation of **networks** is influenced by dynamics, which are similar to the ones shown with reference to strategic relations. In addition to the areas which have been examined in France and in Northern Italy (and followed by Portugal), a higher number of inter-firm networks emerge, and also the choice of network models is more diversified, showing a higher inclination to organisational innovation (see tab. 1 and 2). We observe more networks in the upper part of the supply chain linking grape growers and wine makers. Fewer networks have been identified in the distribution segment of the chain

Please note that we use the term “networks” in a much narrower sense than that usually used to describe distribution chains. In the current usage, most of the distribution channels (especially Ho.Re.Ca.) are organised with a web of agents, but this is not the type of network we have been examining.

Tab. 1 – Number of identified networks according to the function performed

	Italy			Loire	Douro	Valencia	Hungary	*Tot. n. identified networks*
	Trento	Verona	Catania Ragusa					
Production networks	15	16	8	27	12	6	7	**91**
Distribution networks	2	7	1	5	2	2	2	**21**
Networks for supply of services	1	3	1	10	2	0	0	**17**
Tot. n. identified networks	**18**	**26**	**10**	**42**	**16**	**8**	**9**	**129**

Overall there is a majority of organizational networks which include cooperatives, but the relevance of contractual networks is significant.

Tab. 2 – Number of identified networks according to the legal form

	Italy			Loire	Douro	Valencia	Hungary	*Tot. n. identified networks*
	Trento	Verona	Catania – Ragusa					
Contractual networks	6	7	6	10	7	2	3	**41**
Organizational networks (cooperatives)	9	10	4	16	4	4	1	**48**
Organizational networks (for profit)	2	6	0	6	1	1	3	**19**
Organizational networks (not-for-profit)	0	1	0	9	2	0	0	**12**
Mixed networks	1	2	0	1	2	1	2	**9**
Tot. n. identified networks	**18**	**26**	**10**	**42**	**16**	**8**	**9**	**129**

Both contractual and organizational networks are formal networks. Though the research has been focusing on formalised networks, we have investigated the relationship between formal and informal networks, especially by looking at the relationships between members of the networks and their degree of specificity. Unlike previous research, we have found that many formalised networks do exist. Networks should not be contrasted with other organizational forms on the basis of their informal nature. Within formalised structures they present specific features based on strategic and stable relations developed due to a high level of trust.

An important set of differences within contractual networks is related to the form and level of detail in contracts. Contractual relationships tend to be informal, using contracts not highly detailed in the domestic context within production. Their level of formalisation increases in the process of distribution and reaches a higher level of detail in international distribution. Contractual relationships in the agricultural sector are still influenced by a high degree of trust. Communities are small, and composed of repeat players. The role of reputation and other non-legal sanctions is significant. It decreases along the chain in the relationships with distributors and, where competition is higher and market rather than community sanctions are in place.

Tab. 3 - Legal form of contracts regulating strategic relationships (wine distribution)

	National	**International**
Ho.Re.Ca.	Oral or partially written contracts (poorly detailed).	Written contracts (poorly detailed).
LSD	Written contracts (quite detailed)	Written contracts (highly detailed).

Contracts, even oral ones, are generally enforceable. Litigation is low and disputes are generally solved through negotiations not through the judicial process. The different level of contractual detail poses puzzling questions concerning their completeness, and the different modes through which contracts are completed along the chain. In particular, contract performance depends on exogenous factors that become known during the year. The research shows that parties perform their contracts by re-allocating the burden of unforeseen contingencies without significant use of litigation.

1.3.1 Comparing the cooperative and the "private" model

A different element fostering organisational innovation in the regions mentioned above (with the particular intention here of demonstrating the ability to create different models of inter-firm networks) is represented by the co-existence of diversified models of producer enterprises, mainly (a) cooperatives of grape-growers and (b) so called "private" producers (defined in this way for not having a cooperative form). Indeed, the research shows that the more balanced are the two groups of final producers, the more they use different types of networks to compete (e.g. Loire, Verona).

A further step of this process is represented by a different dynamic according to which "private" producers and grape-growers' cooperatives start cooperating by creating mixed networks (for instance, see the prominent example in Verona).

Conversely, the more dominant the role of grape-growers cooperatives, the more these enterprises (themselves being networks) tend to create networks (second- or third-tier networks – see fig. 1), generally preferring the same co-operative form (*iso-morphism*) (e.g. Trentino, Valencia). Even when they adopt other models (e.g. contractual networks) they tend to replicate within this different structure some of the characteristics of the cooperative model (e.g. exclusivity) (*"heterogeneous iso-morphism"*). For example contractual networks between grape growers and wine makers in regions highly populated by cooperatives are more stable, define prices that do not necessarily follow market variations, and include a higher level of service provisions by the wine maker, mimicking the relationships between cooperatives and members.

Thirdly, in areas where the cooperative model is marginal (e.g. Hungary, east Sicily), a lower propensity to create networks has been observed.

In all countries, cooperatives compete among themselves on the market, and this can affect the system as a whole, in some cases also hampering the possibility to collaborate through contract (as happens generally in Douro, and in a very few cases in Trento). The different degree of competition, and the existence of a general governance system may affect the ability for cooperation among cooperatives, and in turn influences the degree of competition with private grape growers and wine makers

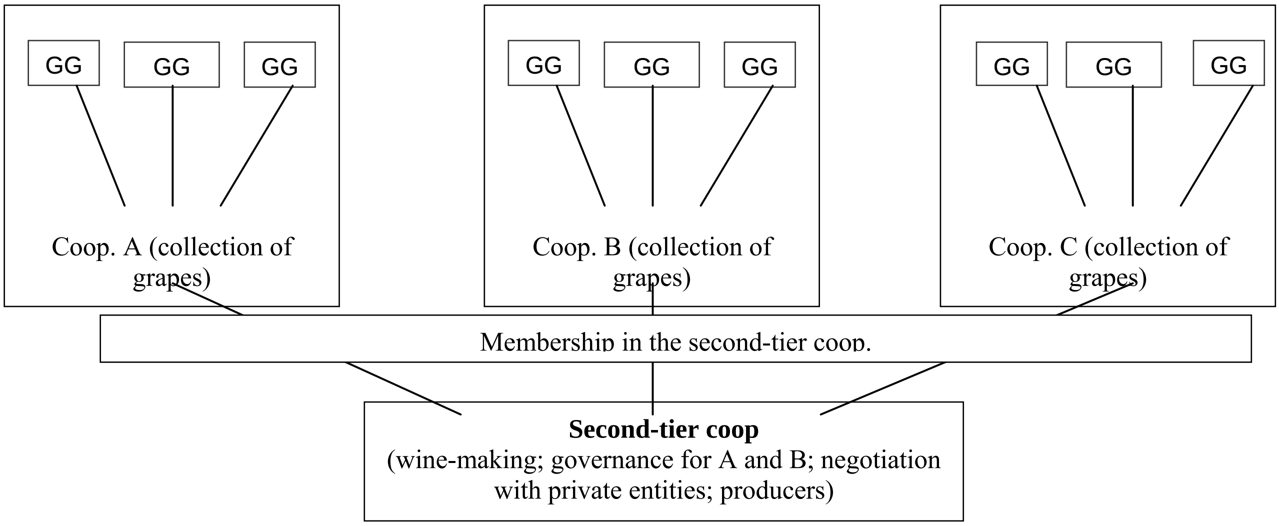
Tab. 4 – Role of grape-growers cooperative and their propensity to create networks

	Role of grape-growers cooperatives (compared with private producers)	*Propensity to create networks; diversification of network models; mixed networks among coops and private producers*
Loire (F)	Coops do not represent a major share of production (14%) if compared with private producers, but they also play an important role and show network dynamism.	High propensity if compared with other regions. Higher diversification of models.
Verona (I)	Relevant share of production (65%)	High propensity if compared with other regions. Higher diversification of models. Unique examples of mixed networks among coops and private producers.
Douro (P)	Relevant share of production (45%)	Relatively lower propensity to create networks. Low diversification of models.
Trentino (I)	Large majority share of production (83%)	High propensity if compared with other regions. Lower diversification of models.
Valencia (S)	Major share of production (80%)	Relatively lower propensity to create networks. Low diversification of models.
Hungary	Marginal share of production (10-15%; 6% in terms of land ownership). Low competitiveness due to political context and cooperative culture.	Low propensity to create networks.
East Sicily (I)	Marginal role, almost nil.	Low propensity to create networks

In particular, with regard to Hungary, the whole wine sector is involved in a more general process of reconstructing the agricultural and industrial system, connected to the post-transition phase, starting from the re-organisation of property rights and rights of use, re-implantation of land, introduction of technology, construction of national and local identity and reputation as an emerging producing country in the "New Europe".

Cultural obstacles related to a market culture emphasizing market models based on State intervention and competition reduce the ability to cooperate among firms, leading to higher level of concentration. The dual model in Hungary with a limited number of medium and large enterprises and a large number of very small enterprises seems to follow a different pattern of growth.

Fig. 1 - Second-tier cooperative for collection and wine-making (Verona)



2. The Emergence of Networks in the Production Chain as a Response to the Fragmentation of Ownership

The research examines the role of networks as a response to the fragmentation of production in terms of both land ownership and size of firms. The average size of cultivated land is very limited and does not permit a move to vertical integration. The average size of firms is small and still related to geographical regions. In the producing countries there are very few national producers with vineyards located in different regions. Even fewer pan-European producers exist. Within this framework the research has investigated whether a consolidation process should be expected with the creation of corporate groups, on the one hand, and networks on the other. The possibility to increase volumes and product portfolios by way of cooperation at domestic and transnational level has been explored across countries.

A secondary, yet related, aspect is the continuity of enterprises, and a consideration of the best governance form to ensure the right combination between stability and organisational innovation.

Fragmentation of land ownership and the means of production is a diffuse feature of the European wine sector, although data varies from country to country[140]. Grape and wine producers tend to be small-sized enterprises controlled by families. Very small enterprises are generally vertically integrated; when size grows given the costs of land ownership there is disintegration, and the chain splits with the emergence of wine makers using grapes bought in the market or within the contractual network.

To a limited extent, and to different degrees in Hungary after privatization and in the other four countries, ownership concentration has occurred in many contexts[141]. In most cases this phenomenon

---

[140] The average size of vineyards in Italy is 1.5 ha, in France 3.3 ha (Vinfhlor, 2007), in Portugal 1.2 ha, in Spain 5.9 ha and in Hungary 0.5 ha. Source Eurostat (2007), except for France.

[141] It has not been possible to find public data on these aspects. However, observation through interviews with institutions and experts in the wine sector has allowed the identification of forms of concentration in the private (non cooperative) sector in the Douro region, as well as various mergers among cooperative companies in the Verona province and, to a

is quite localised, while in limited circumstances, particularly in France, Portugal and Italy, it has given rise to the creation of national enterprises, sometimes in the form of corporate groups with production of wines coming from different regions and d.o. The creation of pan-European wine enterprises and corporate groups is rare in the production segment.

1) **Land ownership.** In relation to land ownership, the costs of vertical integration are affected by geographical constraints (especially in Portugal and Trentino), by economic factors influencing prices (which were significantly increasing in most of the observed areas until the beginning of the financial crisis[142]), by national policies restricting land ownership transfers[143], and by European legal regulation limiting production potential (which is in fact of particular relevance in Hungary and Spain above the other countries of those examined[144]). The forthcoming end of this policy (due to expire in 2015), and liberalization will only partially modify this scenario. A special case is that of Porto where la *ley do terço* contributes to the regulation of production activity[145].

The issue is whether these current changes will lead to a decrease in the number of enterprises (in particular, small ones) operating in the sector, or whether industry fragmentation will remain a feature of this sector, at least along the production chain.

2) **Family ownership and control.** In some cases the family control of the enterprise may represent an obstacle to vertical integration, given the impact on the unity of family assets. Lack of liquidity and high costs push chain fragmentation.

The creation of networks might represent a less intrusive response than vertical integration to the problem of ownership fragmentation. It could allow the sharing of rights to use land without infringing the unity of family assets in terms of ownership. It could also offer the possibility of more efficiently plan succession rights in case no heir is available to continue the activity.

With regards to **machinery and other equipment**, the use of networks could favour not only a cost sharing for purchase and maintenance, but could also contribute to higher efficiency in the use of the means of production, enabling knowledge sharing, specialised service supply etc.

2.1) The findings show that the most common response to ownership fragmentation is represented by the creation of **grape-growers' cooperatives** (see tab. 5). In very general terms, the model of grape-growers' cooperatives leaves both the ownership and the use of land and equipment to the single members, while limiting other forms of inefficiency connected with fragmentation, in particular: reducing the costs of accessing technical and administrative services for the land; reducing the costs (and, possibly, increasing the revenue) of the sale of grapes; and enabling the possible integration of wine making and bottling. As already shown, this type of cooperative is present in all the examined areas, though with significant differences in number, size and function.

---

lesser extent, in Trentino. In Hungary, while the ownership of land is on average highly fragmented, and the size of enterprises is small, a number of larger enterprises is emerging not only among the few remaining public firms, but also among the private ones (see chapter V in this paper).

142 This is not so in the case of Hungary, where land is still relatively cheap, while the need for plantation restructuring and technology supply greatly increases the real cost of purchase.

143 Since 1994, a Hungarian law prevents legal persons as well as foreign citizens from buying land. A few exceptions, due to be extended, are provided for European citizens already established in Hungary.

144 A voluntary grubbing-up scheme is spread over three years (from 2009 to 2011) and comprises an indicative total area of 175,000 hectares. The financial allocations for the grubbing-up measure for 2009 to 2011 are 464 million, 334 million and 276 million euros, respectively. Due to over-subscription, this year priority has been given above all to those producers who grub up their entire vineyard, and then those who are more than 55 years old.

145 The so-called Lei do Terço limits the sales of port wine traders to1/3 of the wine produced during each year. Originally, this regulation was aiming at allowing/encouraging the maturing/aging of wines, and, at the same time, by forcing traders to keep stocks of port, this law guarantees the quality of the wine and protects the market. Please note that in addition to this obligation set out by the lei do terço port traders are also forced by law to maintain a permanent stock of 150 thousands litres of port.

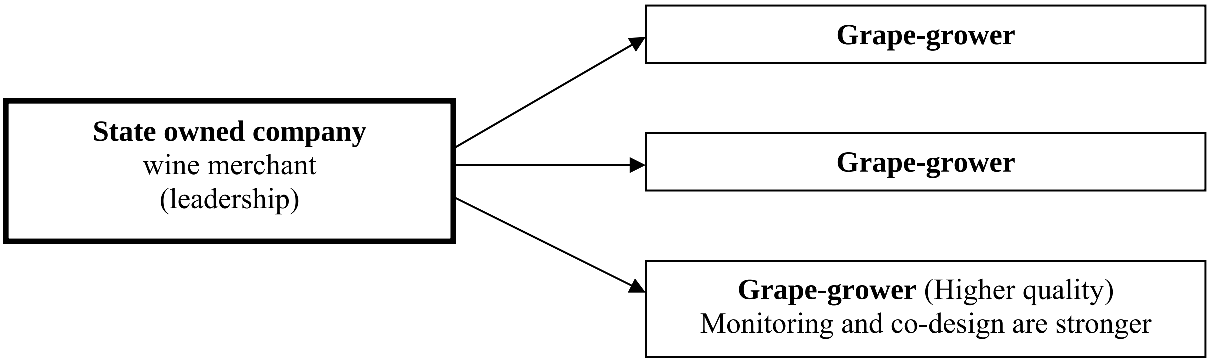
Tab. 5– Main characteristics of cooperatives

	Trento	Verona	Enna-Ragusa	Loire	Douro	Valencia	Hungarian regions
Share on total production	83%	65%	n.a.	14%	45%	80%	10-15%
Main activities	Wine-making, bottling and commercialisation of wine under cooperative label (also through second tier coop).	Wine-making, bottling and commercialisation of wine under cooperative label	Wine-making and commercialisation of bulk wine.	Wine-making and commercialisation of bulk wine. Collective acquisition and use of technical equipments	Wine-making and commercialisation of bulk wine, several also bottling.	Wine-making and commercialisation of bulk wine. Few also bottling but through second-tier coop	Intermediation in grapes' sale. In limited cases, wine production.
Average size or number of members	616 members (incl. second tier coop)	674 members (incl. second tier coop)	48 members	416 members (incl. Service coop)	971 members	700 members	n.a.
Exception to "one member one vote rule"	Allowed	Allowed	Allowed	Allowed	Not allowed	Allowed	Not allowed
Possibility of external directors	Allowed	Allowed	Allowed	Not allowed	Not allowed	Not allowed	Not allowed

It has already been explained in part why this cooperative model is not extensively and effectively used in Hungary. In that context, alternative models could be identified as operating as functional equivalents. The contractual network with a large number of grape growers is used by both state-owned enterprises and privatized firms. A very **large contractual network** has been found; it is led by an important State-owned company, directly controlling a relatively limited amount of land, while establishing stable relations with a large number of grape suppliers (comparable in absolute terms with the number of members of any other large cooperative), and providing similar services to these small enterprises (see fig. 2). As shown below, this type of network might evolve into a **mixed** one, where the leader enterprises promote the formation of an organisational network (normally in the form of a cooperative) among suppliers (see par. n. 7) combined with the network.

The weaknesses of the cooperative model have also triggered the use of the corporate model incorporating 'mutual' functions. In Portugal a company model replicates substantially functions and role of cooperative networks, but formally it falls into the for-profit company case (*Lavradores de feitoria*). In this scenario, the differentiation of members related to the type and quantity of services they provide to the network is possible, and participation of third parties providing financial means is also allowed and encouraged. This is in part reflected in the different amount of company shares attributed to each member (with a minimum cap for production members), and in the composition of the board.

Fig. 2 - Contractual network (Hungary)



2.2) A second response is the creation of new companies leasing the land from the individuals who maintain formal ownership (fig. 4). The research shows that different types of networks, enabling members to use land and machinery jointly, exist. They are rare, with two exceptions covering the French models of **“Scea”** (*Societé Civile d’Exploitation Agricole*) and **“Cuma”** (*Coopératives d'Utilisation du Matériel Agricole*). These are important examples of networks composed by grape-growers and/or wine makers for the joint use of land or machinery and other equipment, enabling both cost sharing and knowledge pooling within the network. Similar structures (in form of cooperatives or for-profit companies), though much less diffuse, have been found in the area of Valencia, while in Trentino some grape-growers’ cooperatives have started considering the possibility of favouring equivalent forms of the sharing of rights to use land or machinery within the same wine making cooperative. These forms of collaboration would also have a relevant role in the planning of the firm’s succession, enabling a more efficient allocation of rights to use the land within the network and preserving the integrity of family assets in terms of property rights.

Fig. 3 - Example of a grape-growers company with common property regime (France)

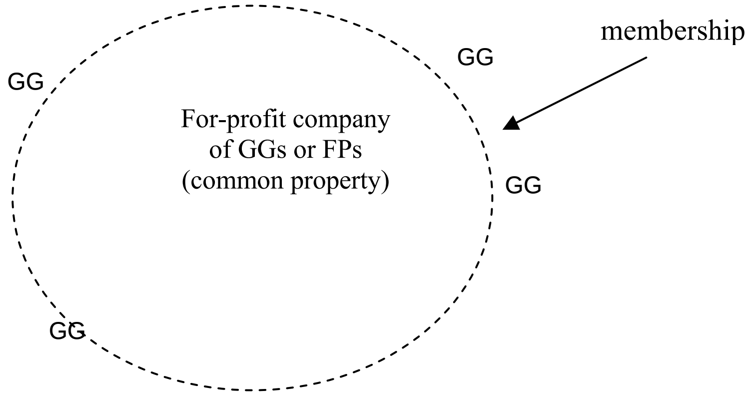
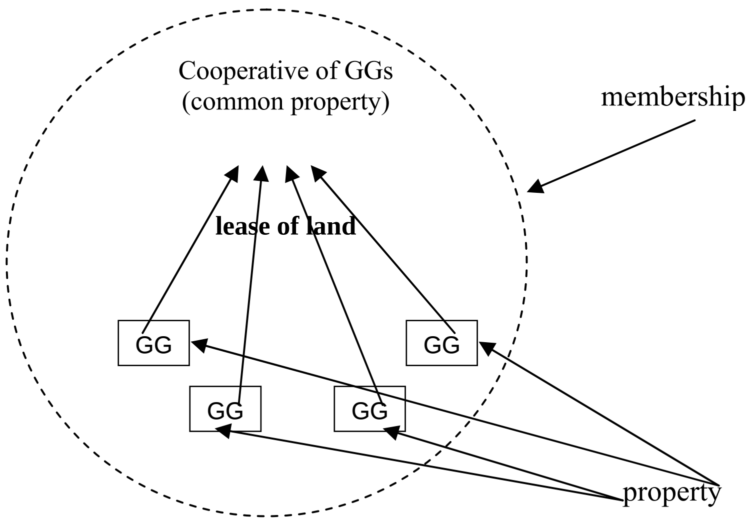


Fig. 4 - Example of a grape-growers cooperative with members leasing the land to cooperative (holding the property rights on it)



3. *The Emergence of Networks in the Production Chain and the Governance of Grapes and Bulk Wine Supply*

We now move to an examination of the entire production chain and the emergence of networks. The research aims to examine the impact of networks on the restructuring of the production chain, and the generation of new forms of competition or collaboration between different types of producers, mainly cooperatives and private producers.

Production networks are primarily domestic, and they are currently moving from a local to a national dimension. However, very few transnational production networks have been found.

The research shows that in most of the case studies the production process is not carried out by a single integrated firm. Market-type relations for grapes and bulk wine supply are quite diffuse. They mainly cover the low- to medium-quality segment and often allow the final producers to improve its offer. Vertical integration has increased over the past few years with small grape growers starting to bottle and sell directly, but remains limited. The governance of a long and fragmented chain is still the main challenge in the wine industry.

The structure of the supply chain can vary among sectors and countries, and presents several organisational patterns as well as different models of collaboration among firms[146].

In the wine supply chain the most important phenomena concern the contractual relationships among grape-growers, producers and distributors, and vertical integration along the chain. Focussing on the first topic, some authors have recently tried to address the allocation of power along the chain and the

[146] Gereffi – Humphrey – Sturgeon, 2005, *The governance of global value chains*, Review of International Political economy, 12 (1), pp. 78-104; Feenstra, 1998, *Integration of Trade and Disintegration of production in the Global Economy*, Journal of Economic Perspectives, Vol. 12, n. 4, Fall, pp. 31-50.

determinants of prices[147]. Another trend concerns changes in the structure of supply chain. In particular an increase in the concentration of distributors has been observed and some cases of integration in the distributive phase by final producers[148].

Within this scenario the research has identified two types of networks (found in every case study, though to different extents), and a third type, which is less common (see tab. 6):

- ***contractual networks***, mainly organised as sets of linked bilateral contracts for the purchase of grapes or bulk wine, and rarely as multilateral contracts: these contracts are "strategic" and characterized by high interdependence among the network's participants, often led by a common buyer;
- ***organisational networks***, mainly in the form of cooperatives (see the table below), composed by grape-growers (first-tier cooperatives) or by first-tier cooperatives (second-tier-cooperatives), to which members sell their produce (grapes/bulk wine), and also receive services;
- ***mixed networks***, in which contractual and organizational devices are used jointly.

Tab. 6 - Production networks identified according to the legal form

	Italy			**Loire**	**Douro**	**Valencia**	**Hungary**	***Tot. Production networks***
	Trento	**Verona**	**Catania - Ragusa**					
Contractual networks among bilateral coordinated contracts	5	2	4	8	7	2	2	**30**
Multilateral agreements	0	0	0	0	0	0	1	**1**
Organizational networks (cooperatives)	8	9	4	15	4	4	1	**45**
Organizational networks (for profit)	1	2	0	3	1	0	2	**9**
Organizational networks (non profit)	0	0	0	0	0	0	0	**0**
Mixed networks (contractual and organizational)	1	2	0	1	0	0	2	**6**
Tot. Production networks	**15**	**15**	**8**	**27**	**12**	**6**	**8**	**91**

[147] Chambolle – Saulpic, *Growers vs. Merchants Bargaining on the Price of Champagne Grapes and the Role of Contracts when Bargaining is Unbalanced*, Journal of Wine Economics, Vol. 1, No. 2, pp. 95-113; Heien, *Price Formation in the California Winegrape Economy*, Journal of Wine Economics, Vol. 1, No. 2, pp. 162-172; Couto Viana – Lima Ridrigues, *What Determines Port Wine Prices*, Journal of Wine Economics, Vol. 2, No. 2, pp. 203-212.

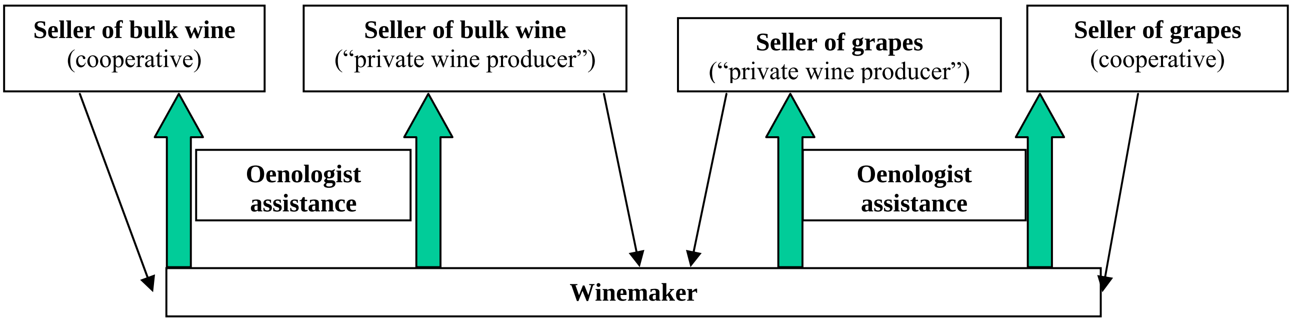
[148] See European Commission, The functioning of the food supply chain and its effect on food prices in the European Union, 2009, http://ec.europa.eu/economy_finance/publications; AGCM, Audizione del Presidente dell'Autorità garante della concorrenza e del mercato Antonio Catricalà, presso la XIII Commissione Agricoltura della Camera dei Deputati nell'ambito dell'indagine conoscitiva sull'andamento dei prezzi nel settore agroalimentare, 31 luglio 2008, www.agcm.it; Pomarici – Boccia, La filiera del vino in Italia: struttura e competitività, in Cesaretti – Green – Mariani – Pomarici (eds.), Il mercato del vino. Tendenze strutturali e strategie dei concorrenti, Angeli, Milano, 2006, 142-189.

Although the first two models have been found in all the examined regions, their effective role is different in these areas.

With regards to **contractual networks**, these are generally led by a final producer and structured through the use of long term bilateral contracts, often (but not always) requesting

- exclusive supply of grapes or bulk wine and also
- ensuring (limited) purchase of a minimum quantity, if quality requirements are met.

Fig. 5 - Supply of bulk wine: contractual local network (Verona)



While these networks are mostly composed of a selected number of suppliers in all case studies, the Hungarian experience provides an example of a very large contractual network, to some extent functionally equivalent to ordinary grape-growers' cooperatives.

Cooperatives. Large number of grape-growers, exclusivity and total conferment obligation, "one member one vote rule", combination of goods exchange and service supply relation between the members and the network: these are the main and general features of the **grape-growers' cooperative networks**, as observed in the several contexts examined by the research. Cooperatives emerge as a response to ownership fragmentation but have internalized a strong insurance function. Small farmers becoming members can rely on strong support, both financial and technological. During crises, as it is currently the case, cooperatives not only preserve the continuity of small enterprises but often provide assistance to external farmers. This can happen in different ways: by integrating new members or, more often by buying grapes that would have been bought by private wine makers. However, the strong presence of cooperatives often changes the relationship between grape growers and wine makers in the private sector giving rise to some kind of spill-over effect

Yet, important differences between the two production networks emerge regarding:

- the evolution from a merely intermediary role in grapes' sales towards an agro-industrial entrepreneurial model, based on technology, capacity building, and ability to integrate production and bottling functions (as can be seen in most French, Italian and Portuguese cooperatives, in some of the Valencian ones, only very partially in Hungary);
- self-financing capacity (very limited in Hungary as compared with other observed regions);
- exclusivity of production relation between members and cooperative (this not being generally required in Hungarian cooperatives);
- ability to influence the market price of grapes (this being observed in north east Italy but not elsewhere);
- separation between goods exchange and service supply (this was formalised in French cooperatives, but not in the others);

- level of independence of management from members of the cooperative (this being very limited in Hungarian cooperatives as compared with other models);
- possibility of derogating from the general rule of “one member one vote rule” (as provided for in most western European legal systems, while not in Hungary).

The comparative weakness observed in Hungarian cooperatives limits their ability to generate competitive advantages for members, and suggests that, beyond any prejudicial resistance against this model, due to its link with the past regime, much could be done to enhance its efficiency and effectiveness through a renovation of its governance and operational structure.

At least in part, this weakness of the Hungarian cooperatives can help explaining the move towards **“mixed” forms of productive networks**, combining contractual and organisational devices (see fig. 6 and 7 for examples not regarding Hungary). Comparing the observed regions, the research has identified two main models of mixed productive networks:

- the first, in which a new company is formed among the suppliers, on the initiative of a leading final producer. The producer is the driver but stays out of the new company and maintains only a long term contractual relationship with the new entity. The main goals pursued by the final producer are to coordinate and stabilise its grape supply (in that way, grape suppliers will be members of the company, as the main contractor for the buyer) or to externalise a substantial part of the productive function, including the coordination and monitoring of the grape supply (in this way the company will be acting as an independent contractor and a net of contracts – bilateral and/or multilateral - will be concluded between the final producer, the coordination company and the suppliers);
- the second, in which a new company is formed to stabilise and reinforce a (usually already existing) contractual strategic collaboration between two enterprises.

Fig. 6 - Network combining contractual and organisational devices for production of high quality wine (Verona)

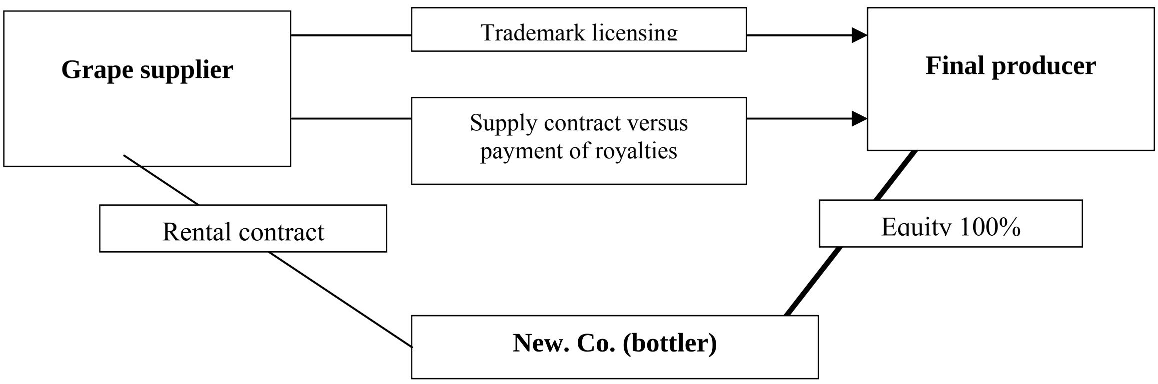
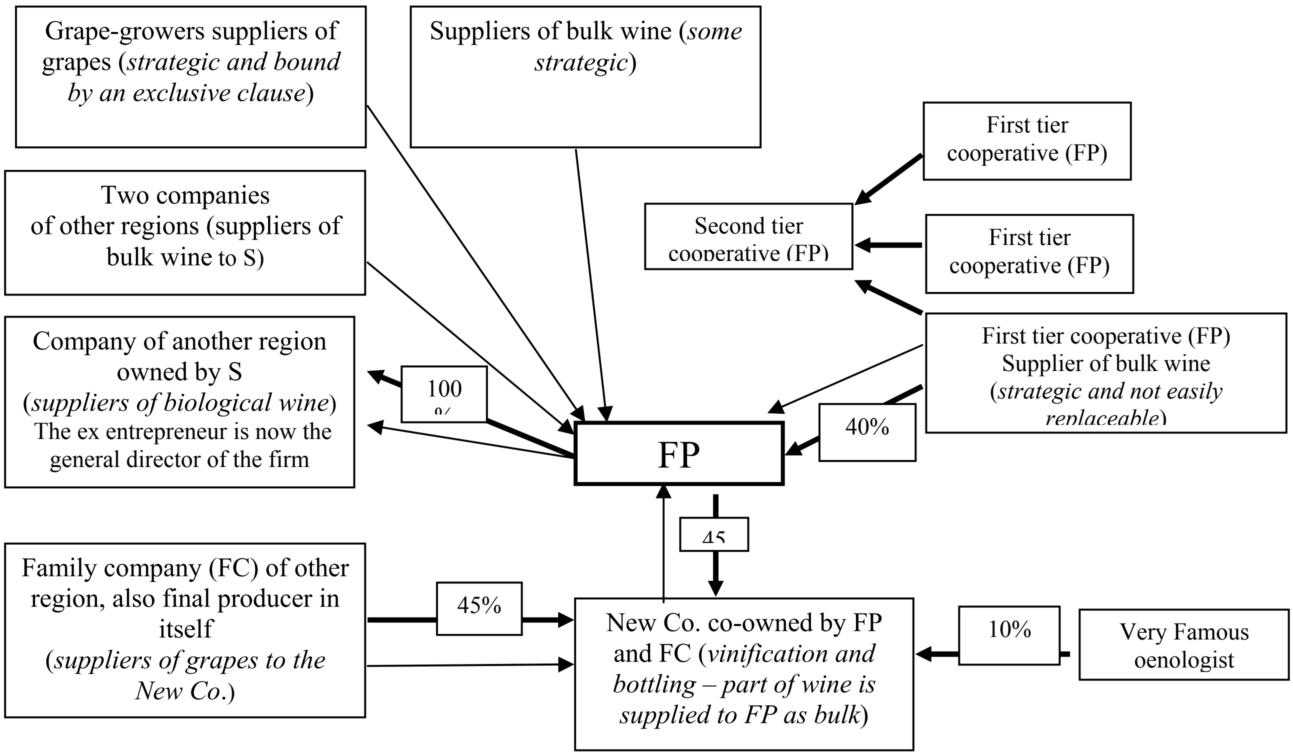


Fig. 7 - Supply of bulk wine: mixed national network (Verona)



The former type of mixed network has been mainly observed in Hungary (very rarely in other cases). The latter type of mixed network has been mainly observed in the Loire and in north east Italy: here the corporate dimension of the network tends to stabilise the contractual relationship between grape growers and wine maker, and to reinforce the interdependence between the partners, increasing the costs of exiting the collaboration.

3.1. The relationship between cooperative networks and private producers

While comparing the several contexts examined by the research, further dynamics can be observed as regards the relations between cooperative companies and other private producers.

Indeed, depending on the development of the cooperative model, three patterns have been identified:

- the first, in which the **cooperative model** is **dominant** (Trentino, Valencia); here contractual networks do exist and might involve cooperatives as wine suppliers; what is particular to this model is that contractual networks present features mirroring the cooperative model (e.g. co-determination practices are more frequent in contractual networks compared to other areas); a form of mutual learning has already been highlighted with respect to this;
- the second, in which the **cooperative model** has a relevant position in the production chain, although **private producers** control a comparable (and sometimes larger) share of the market (Verona, Douro, Loire); here contractual networks tend to be comparatively more diffuse than in the previous case, and, occasionally, involve private producers and cooperatives in some joint networks;

- the third, in which the **cooperative model** plays a **marginal role** in the production chain (Hungary, east Sicily); here contractual networks do exist but they are nevertheless rare as in the other types of networks.

The different forms of co-existence of the two network models in the examined areas also shows a critical aspect connected with the emergence of the cooperative network: the combination of **collaboration and competition between cooperatives and private producers**.

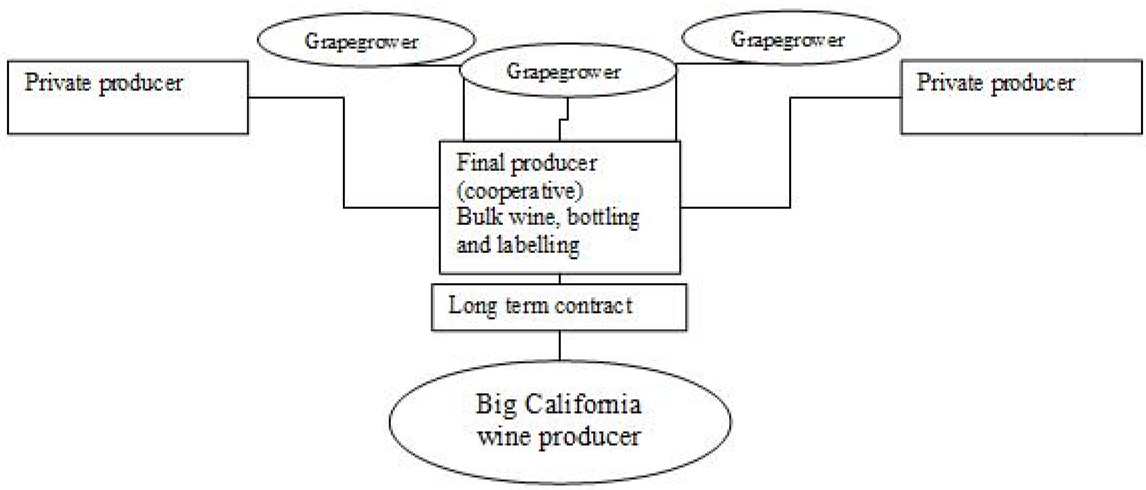
In this respect, the research shows an evolutionary pattern in Europe going from:

- a framework in which grape-growers' cooperatives and private producers cover different segments of the market (distinguished by type of product – bulk v. bottled wine – and by price level), collaborating along the filière but not competing (this seems to still be the case in Hungary and in east Sicily); to
- a situation in which cooperatives have started bottling their own wines and compete to some extent with private producers (this is the case in all the other areas, where cooperatives are present and operate as fully integrated wine producers); to
- a situation in which cooperatives and private producers integrate through the creation of mixed networks (limited examples in Verona, Trentino).

A further challenge is related to the local v. international dimension of inter-firm collaboration. While the cooperative model has traditionally been rooted in a local context, mainly relying on the territorial competitive advantage, the global competition leads the network itself to move beyond its original boundaries, and into foreign markets:

- by collaborating with other cooperatives (this is the most frequently observed case, as seen with regards to cooperatives located in the same region or even in different regions or countries);
- but also by collaborating with private producers or importers (this is a more rare situation, however it seems to be emerging in some north eastern Italian experiences; see fig. 8).

Fig.8 - Transnational network between cooperative and private producer (Trento)



3.2. Comparing contractual and organisational production networks

In general terms, the research shows that the contractual model is used more often for high premium wine production, and the cooperative model is more extensively used for low to medium price production (see par. 8, table n. 7). Production contractual networks arise on the initiative of the final producer, which coordinates them. The main function of production contractual networks is to provide high quality products, and final wine makers differentiate these relationships, taking the form of a network, from those related to basic wine based on spot transactions in the market. Cooperatives emerge from the initiatives of grape growers, which are small enterprises that are often unable to grow to a significant size in order to have their own equipment for winemaking and bottling. Only in a later stage when size and quantity is reached, they start to improve quality also through the creation of internal quality projects, which provide incentives to members in terms of price per quantity paid (this has been the experience in Trento, Verona and Douro).

Thus, the two types of networks respond to different needs. However, some common functions can be observed by comparing the two.

Indeed, in different ways both types of networks tend *to stabilise* the grape/bulk wine exchanges, enabling specific investments despite the structural uncertainty linked with seasonal cycles. This is possible through a commitment (a formal one in case of cooperatives; often informal in the case of contractual networks) to sell/buy the product in compliance with given standards. In the case of cooperatives and in some contractual networks, this stability is reinforced by imposing an obligation on the seller to supply the network exclusively.

Transaction costs connected with ordinary offer/demand mechanisms are also kept under control through the network, due to the centralisation of the functions of administering and setting the rules of the exchange transactions between grape growers and the cooperative. Again, a greater formalisation of these rules emerges in the cooperative model compared to the contractual one.

Of course, at least in one respect, the two models play a very different function: indeed, given its "mutual" characteristic , the cooperative model allows members to integrate a further step of the production chain, by becoming their own "buyers" through the creation of a network and, possibly (as is so in all case studies, yet rarely in Hungary) by gaining control over wine making and often bottling, while these functions are under the overall control of the leader enterprises in contractual networks. This aspect significantly changes the structure of the network, in relation to the allocation of "value" (assigning part of the value connected with these further steps of the chain to the members of the network) and, to a limited degree, to the allocation of power (formally assigning to members at least some basic decision rights in the governance of the network, though a general separation between ownership and control definitively characterises the structure of many cooperatives, given their large size).

3.3. Creation of networks for wine production (production of new wines)

We rarely found networks for the production of new wines with different producers creating a new collaborative form while leaving the existing production with their own company. Among the few, the majority can be found among national wine makers producing for foreign markets.

We can distinguish different models:

a) networks set up by same national producers for foreign markets (*Italy, France*);

b) transnational networks, set up by wine producers from different countries that agree to produce a new wine (with a distinct label) for:

b.1. the market of one of the producers (few examples in the US);

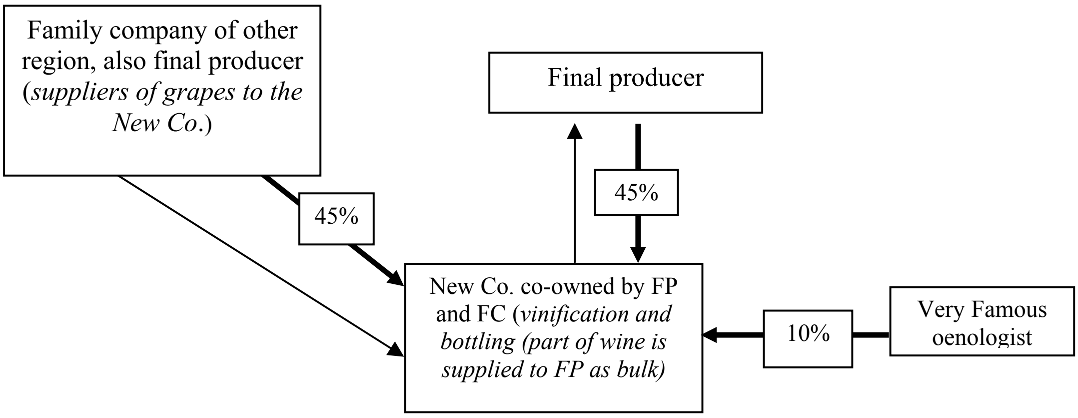
b.2. a third market where none of the producers is located.

Within these typologies, trademarks play a significant role. Inter-firm collaboration is often based on production of new wines with different types of ownership arrangements.

Within production networks different forms have been identified:

- contractual agreement with single trademark ownership;
- contractual agreement with joint trademark ownership;
- new company with or without contractual agreement (see fig. 9).

Fig. 9 - Production of co-branded wine: joint venture



3.3.1 Private labels: retailers become wine-makers

An increasing phenomenon is that of wines produced by final retailers. This occurs both in LSD and in Ho.Re.Ca. While in the latter bilateral agreement between wine maker and the single restaurant are common features, in relation to the former different forms of vertical network have been found. The retailer chooses between two main forms:

- it directly selects a group of wine makers through the management;
- it uses an intermediary which selects partners.

Retail private label used to be associated with basic wines but increasingly it is deployed for quality wine, and goes well beyond table wine with d.o.

We have found evidence primarily of a transnational network between an international retailer and a group of wine makers within one country. Only in one case we have found evidence of a retailer creating a network of intermediaries acting in different European countries as promoters of networks of wine makers

These networks are characterizes by strong quality and safety control to preserve retailers' reputation, and impose significant costs on wine makers to comply with the additional requirements beyond those associated with the standard certification.

4. The Emergence of Networks and the Governance of the Production Chain: Networks as Means for the Enactment of Strategic Projects in the Area of High Quality Wine Production and Compliance with Safety Standards

The research examines the role of networks as form of governance of the production chain with special regard to their impact on power and profit allocation along the chain. It also investigates the impact generated by the increase in the relevance of the regulatory dimension of the production process due to both public and private regulators. In terms of chain governance, it analyses whether these processes are led mainly by producers or by distributors, and whether they influence the formation of vertical networks.

The importance of quality and safety regulation has increased in the past decades also due to scandals which have triggered serious transformations influencing the shape of the chain and the degree of interdependence among the different stages of the production process. These changes have affected the choice of organizational forms and the governance of the *filière*. The traditional horizontal model, where wine makers, through their associations and specialized bodies, were in charge of quality and safety control, has recently been complemented by a vertical model, where the role of retailers has increased, especially in relation to private labelling.

This interdependence and need for (vertical) coordination is influenced by two main factors:

- the increase in standard setting and (self-)regulatory dimension of the whole process of production and, to some extent, distribution;
- the use of technology as a tool which is simultaneously able to reduce costs of coordination, and compliance with general standards, using systems of traceability and error tracking.

(A) For many decades, particularly in the traditional producing countries, the regulatory dimension of the wine making process has been primarily connected with the production of **high quality wines,** and the production of high quality wines has been connected with the regulation of **denominations of origin**. These correlations are still important in Europe (although less pivotal, especially for export to non-producing countries, or in emerging producing countries, like US or China). In fact, in most of the examined areas, the research has identified networks for the production of high quality wines in the segment of wine with denominations of origin: mainly contractual networks, coordinated by wine makers, establishing coordinated strategic relations with highly selected grape suppliers. In some cases, the use of contracts is combined with corporate devices (e.g. cross-capital ownership, corporate joint ventures). Similar networks have also been identified for the production of premium wine (or superior) in the area of wine with **indication of origin** (Loire, Trentino, Verona), but not for the production of table wine.

D.o. and g.i. regulations still play an important role in driving quality-oriented production strategies. However, at least in traditional producing countries, regardless of this regulation and beyond the distinction between d.o. ad g.i. wines, inter-firm networks tend to be formed for the production of “premium” and “high premium” wines to a larger extent than for the production of “basic” and “popular premium” ones (see tab. 7).

Tab. 7 - Percentages of networks (regardless of the form) in relation to the quality of the wine produced (production networks only)

	Percentages	*Tot. networks*
Medium-low	**8.80%**	**8**
Medium-high	**91.20%**	**83**
Tot. networks	**100%**	**91**

Note: for 5 networks information concerning quality of products is not available

A somewhat different situation has been observed in Hungary, where enterprises more focussed on the domestic market aim at producing d.o. wines, relying on internal growth more than inter-firm collaboration and networks; while enterprises that are more export oriented pursue a mixed strategy (between d.o. production, for the domestic market, and **varietal production**, for export): here, networks cannot be necessarily correlated with d.o. production, this being often carried out directly by the enterprise, while it may be formed for the production of table wine in the segment of basic or "popular premium" wines.

A similar objective can be found in a particular Portuguese case, where a contractual network was created in order to provide a stable quantity and quality of brand-based wine, falling into the 'popular premium' category, to be distributed internationally. In this case, though not correlated with d.o., foreign producers receive detailed indications concerning the type of wine, and submit to strong monitoring in the production process.

(B) The emergence of networks based on vertical coordination of the production chain is more recent (see fig. 10). Here, the regulatory dimension is not only focused on product quality but also on **safety**, **environmental concerns** (e.g. connected with packaging or transportation), and **health issues** (e.g. for bio-production). What is particular about these networks is that:

(1) the vertical coordination is more extensive, involving the commercial part of the chain and the distribution activity;

(2) the link with a given territory is less important, since the network may well have an international dimension;

(3) given these broader boundaries, the use of technology as a means of control and coordination has become more relevant;

(4) the network is often led by distribution enterprises rather than wine producers;

(5) the use of particular labels or trademarks may help to signal the value of this coordination (some cases of private labelling may well be included within this category).

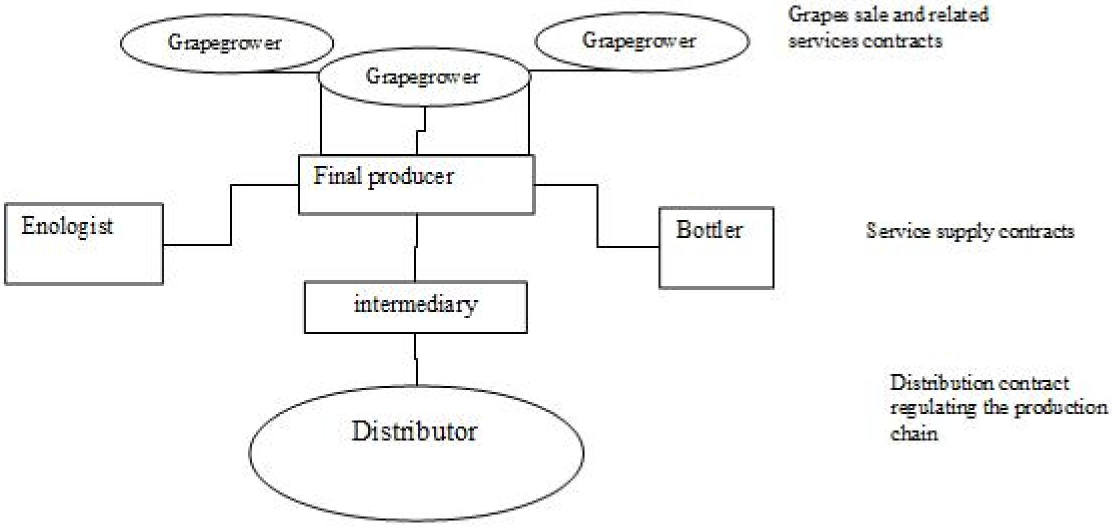
This being something of a transnational phenomenon, it is not easy to localise it and compare the examined areas under this profile. What the research helps to observe is that the leaders (mainly distribution enterprises) and the coordination knots of these networks (a sort of co-leaders, often being: specialised intermediaries, importers, bottlers) are normally localised in more dynamic markets, with a high concentration of leading distribution enterprises, such as in the UK, France and Germany, or with an emergent role of specialised intermediaries, such as in north Italy.

If compared with the more traditional networks for the production of high quality wines (A), these are more hierarchical and more formalised (B).

Indeed, in the former type of networks (under A) quality standards (if connected with d.o. rules) are primarily produced by inter-branch organisations, representing the interest of all the classes of enterprises operating in the production chain. The coordination of quality wines networks is mainly informally organised by the leader company (or its employees, consultants, oenologists, etc.) and its ability of conveying critical knowledge and inducing compliance with regulatory standards through the network. Contracts are often written but less detailed. This type of private regulation is combined with the regulation of quality standards as set by retailers.

In the latter type of networks (B), the adoption of standards is normally due to a leader company (often a retailer in the large distribution segment) imposing them on the whole chain. Contracts referring to the standards are written and much more detailed; coordination is ensured not only through the presence of consulting services and physical monitoring by the leader's agents but also, and more intensively, through the formal documentation of standard compliance. Unlike the former scenario, these networks are in fact always only contractual, and based on the coordination of bilateral relations. Indeed, this structure allows the leader to exercise higher discretion in bilateral negotiation rather than in multilateral arenas. This of course raises an issue concerning the risk of abuse inside the network and the impact that this risk may have on the individual incentives to collaborate.

Fig. 10 – Networks based on vertical coordination of the production chain



5. *Networks for the Governance of the Distribution Chain: The Relationship between Producers and Distributors*

The research aims at examining whether and how networks are used to govern the distribution chain, and to what extent they influence the relationship between producers and distributors, thereby reducing the asymmetry of power and profit allocation.

It also investigates whether networks are able to increase the efficiency of the distribution chain by reducing the fragmentation of the wine supply and increasing the size of wine portfolios, and by favouring information sharing systems as well as the provision of specialised services along the chain to wine makers and grape growers.

The presence of networks within the distribution chain is not less important than the presence identified within the production chain, though quantitatively more limited.

As in in the entire food sector, including wine, the distribution chain has undergone transformations concerning concentration of the LSD (large scale distribution) channel with the emergence of large multinational groups operating worldwide[149]. In the wine sector, the Ho.Re.Ca. channel (Hotels, Restaurants, Catering) has become less relevant, while LSD has acquired larger shares in all the observed areas. LSD has also adopted a more inclusive approach to wine selling, expanding the range of products and moving upwards in the price scale. Today, at least in the high segment of LSD, it is quite common to find high premium wines.

The role of specialised intermediary enterprises and that of sales agents and importers should also be emphasised, having special regards to their ability to convey strategic information concerning the target markets and, in some cases, to establish forms of coordination of the wine supply, which remains otherwise fairly fragmented.

Here again, the distinction between vertical and horizontal networks should be considered: the former including networks between producers and distribution enterprises; the latter including networks among producers and networks among distribution enterprises.

5.1. Vertical networks

Vertical networks occur between final producers, and importers or distributors. There is rarely a formation of vertical networks between wine makers and Ho.Re.Ca.

No vertical networks have been found between wine makers and large distribution chains. LSD does not have incentives to create stable, legally binding relationships. Often these relationships are stable but contracts are short term. An exception is related to the private label when the retailer (or an identified bottler) acts as a coordinator of production more than a distributor.

Within the above scenario, the legal form is primarily contractual. It is sometimes stabilized through the creation of new companies with some modification of the underlying contractual relationship. The new company is generally the exclusive distributor for the producers, but often also distributes products of other producers (generally complementary products).

Different examples of vertical networks can be observed depending on the type of actors involved (agents, importers or new specialised intermediaries) and the objectives pursued through the network (accessing new markets, reinforcing existing access, coordinating comprehensive portfolios in condition of high fragmentation of offer).

5.1.1. Networks between final producers and agents or importers

Two types of vertical coordination systems are quite common to all the examined case studies: the sets of relationships between the final producer and its commercial **agents;** and, with regard to international trade, relationships between the final producer and its **importers**.

Not all these relationships are strategic, and not all display the intense interdependence among the parties which characterizes the existence of a network. However, some of these relationships do indeed display interdependence, with the agent or the importer (the latter more than the former) being involved in the design of the final producer's commercial strategy, in some cases influencing the production process as well. Critical knowledge is also shared within these networks. In these networks the main role of the importers is to reduce transaction costs and transfer information about foreign markets to the producers.

Here again we observe evolutionary patterns whereby a contractual network is, over time, combined with an organizational one in the form of a corporate joint venture, or in the creation of cross-capital ownership. This combination reinforces and stabilizes collaboration among the parties. Producers involved in these types of networks are mainly medium enterprises, already having a relatively strong

[149] See COM (2009) 591 on A *Better Functioning of Supply Chain in Europe* including SEC(2009) 1445; SEC(2009) 1446; SEC(2009) 1447; SEC(2009) 1448; SEC(2009) 1449; SEC(2009) 1450.

position in the international market. Though relevant, these are not common examples in the observed areas.

5.1.2. Vertical distribution networks led by specialised intermediaries coordinating large wine portfolios

Supply fragmentation often constitutes an obstacle to accessing consumer markets. The response is the emergence of simplifiers, cognitive intermediaries which collaborate with category managers in LSD and importers. Given the boundaries and the complexity of the distribution chain, new enterprises have emerged operating as **specialised intermediaries** and providers of services related to the distribution activity (e.g. logistics, sourcing of wine suppliers as well as bottlers, marketing services for retailers etc.). These play an important role in the governance of the production chain, as well as enhancing the efficiency of distribution both at domestic and international levels.

The research identifies two main patterns of contractual networks:

- one, as seen in the European context, where the intermediary enterprise coordinates a network of small retailers, providing them with critical and tailored services (see fig. 11);
- another, seen in the extra-European context, in which the intermediary enterprise is part of a larger network composed of similar enterprises operating in other European countries as goods and service providers of a large distribution chain out of Europe (see fig. 12).

Both types of networks are based on the links among bilateral contracts. In both cases the contract performs a chain governance function where the exchange of goods and services, as established at bilateral level, represents only a part of the value of the network, with most of the value being related to the ability of following market trends, and readjusted by changing product portfolios. Whether a multilateral framework contract might serve this purpose more effectively than a mere link among bilateral contracts is an issue deserving further attention. The evidence collected shows that it is not used.

Fig. 11 – Intermediary enterprise coordinating a network of small retailers

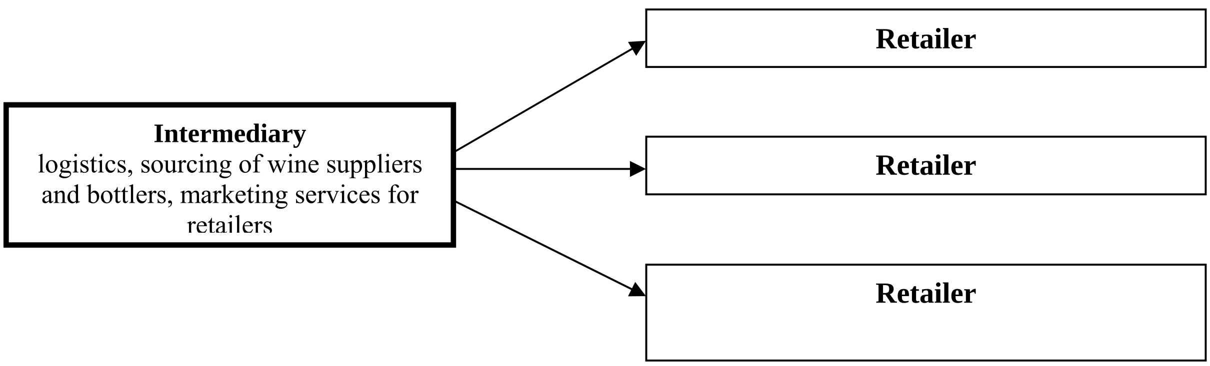
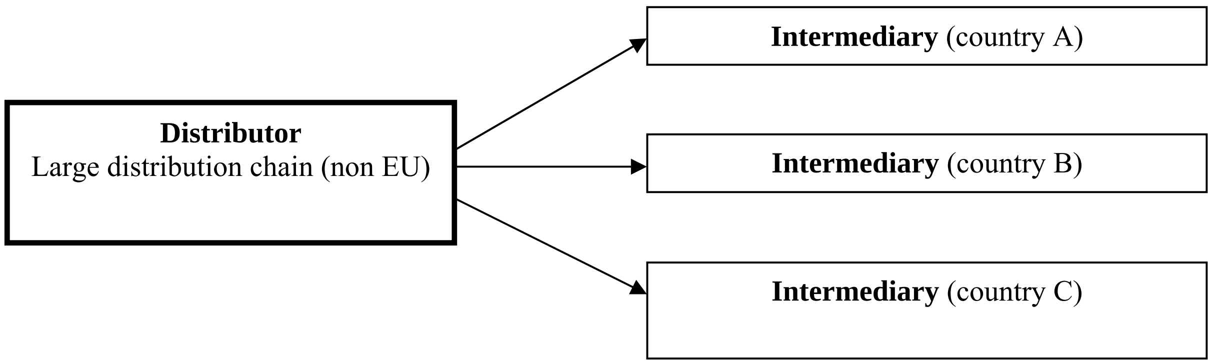


Fig. 12 – Intermediary enterprises part of a transnational networks coordinated by a distributor



Similar responses to fragmentation of wine offer may come **from final producers** that have the economic strength to develop **their own distribution facilities**, sometimes generating a separate entity for distribution purposes. Indeed, in these circumstances, instead of focusing on their own products, and beyond establishing a selective partnership with one specific producer (see above sub (I)), these distribution enterprises may coordinate a more comprehensive portfolio composed of the promoter's wines as well as wines bought from different national suppliers (examples have been observed in Hungary in particular and to a more limited extent in Italy). Again, the ability of the network to establish fiduciary links among competitors is a key element for making this collaboration effective. Often they are composed of producers coming from different countries or producing different wines (still and sparkling) so that the risk of opportunistic behaviour by the distributor which is vertically integrated with the producer is minimised.

Similar strategies have been identified by the research as regards the formation of **European corporate groups**, whose subsidiaries are in charge of the group's product distribution at the domestic level. Inasmuch as the conditions for European integration into corporate groups are not observed, the formation of **European networks** should represent a viable solution to the high fragmentation of the European offer in the global market.

5.1.3. Vertical distribution networks led by specialised intermediaries coordinating customer demand

Due to wine consumption significantly decreasing over the past few decades, the ability to attract and coordinate wine demand has become a key function in the wine market.

From this perspective, technology has had a profound influence on market functioning, favouring the simplification of distribution chains, with a more direct relation between consumers and producers. The role of internet service providers has become critical, together with the role of distribution enterprises using this technology. In addition to online direct selling, specialized web sites have developed

The use of telecommunication systems changes the modes of competition, allowing a wider exposure of potential customers to a larger demand without significantly increasing their information costs. If this can prove convenient to any single producer, a more effective impact on consumer demand arises when the portfolio is sufficiently large to justify the use of this technology. The creation of **Internet purchase platforms**, in which several producers participate, coming from different regions and countries, may be thought of as one of the possible drivers of European competitiveness in the global market. It should be made clear that these are privately-owned companies which negotiate with wine producers and sell their products on the Web. We have not found evidence of platforms promoted by wine makers with the creation of a new company.

A very different form of coordination of customers' demand as driver of competitiveness of wine production has been found in Hungary with the creation of a contractual network among an intermediary service company and a number of affiliated and long term buyers of selected types of wine, as supplied through a parallel contractual network, coordinated by the intermediary company, for the production of wine (labelled after the intermediary organisation and the customer himself) in accordance with strict standards.

In Hungary, where the reconstruction of the wine industry is of primary concern, the vertical integration of the wine chain (from the grape to the consumer's glass) helps to enable and secure some important investments in production thanks to an indirect "pre-financing" of the production.

If extended to different contexts, this model could be used to coordinate dispersed demand of wine customers (like the one of Ho.Re.Ca. retailers, for example) effectively, as vertically affiliated with a network of wine producers.

5.2. Horizontal networks

5.2.1. Networks among producers or promoted by producers

The research has observed forms of collaboration among producers to improve distribution, particularly access to foreign markets and new markets.

These networks mainly arise because producers are dissatisfied with importers and want to have direct relationships with retailers. Most often, final producers already dispose of a distribution network and intend to enhance its efficiency and ability to penetrate new markets. In a few of the observed cases, the network serves as the main or exclusive tool to access national and, particularly, international retailers (these examples examined regard distribution networks among grape-growers cooperative companies).

There are two most common models:

1. creation of **new company** among producers (examples are identified in north east Italy and the Loire – see fig. 13). The form of **economic interest groupings EIG** (Loire) and **cooperative company** (Valencia) is also used, though less frequently. This model is used when producers of the same country want to access/improve foreign markets;
2. **contractual agreements** between distribution company controlled by Producer A and Producer B (see fig. 14). Again, the precondition is that products are not competitive. Often Producer B agrees to distribute for A in its country and A for B in its country (Symington and Torres). But there cases where A distributes also for B, C, D located in three different European countries. Sometimes these contractual agreements are combined with:

    1. cross shareholding ownership;
    2. governance agreements.

Though different as regards to legal form and strategic objectives, all these networks help to grant producers a stronger position *vis-à-vis* the distribution enterprise, enabling a wider composition of the offered portfolio of wines and allowing access to facilities (including services) they would never obtain under the same conditions. This possibility could be even greater if a distribution enterprise is part of the network, favouring a more balanced relationship with the producers.

Fig. 13 - Organisational network for distribution in foreign market (Verona)

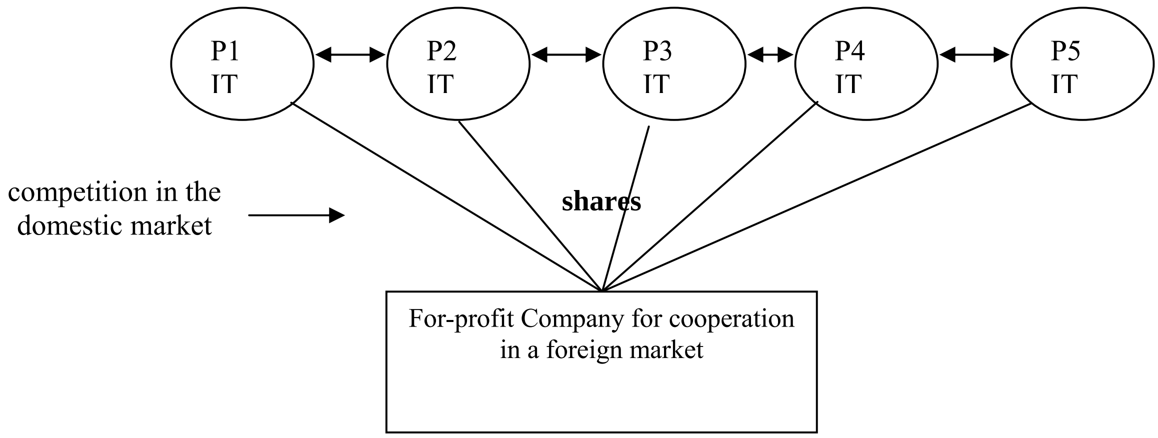
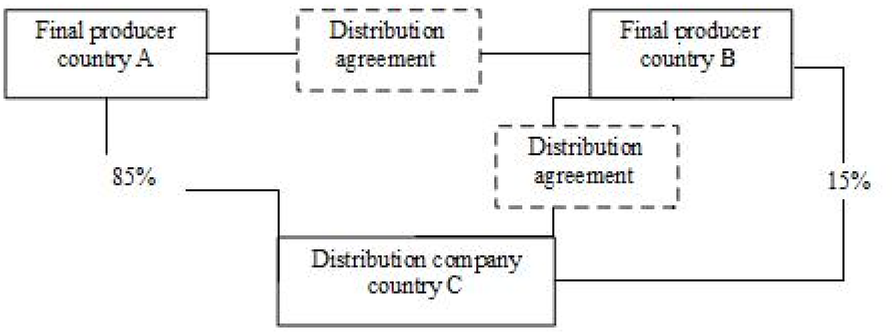


Fig. 14 – Contractual network for cross distribution in different countries (Douro)



5.2.2. Networks among distributors

On the distributors side, fragmentation is lower and concentration especially in LSD is a prominent feature both in domestic and international markets. Coordination and "consolidation" of wine demand is concurrently pursued through:

- vertical integration of distribution enterprises and formation of corporate groups (especially in the segment of large distribution chains)
- networks (for large distribution chains and enterprises operating in the Ho.Re.Ca. channels).

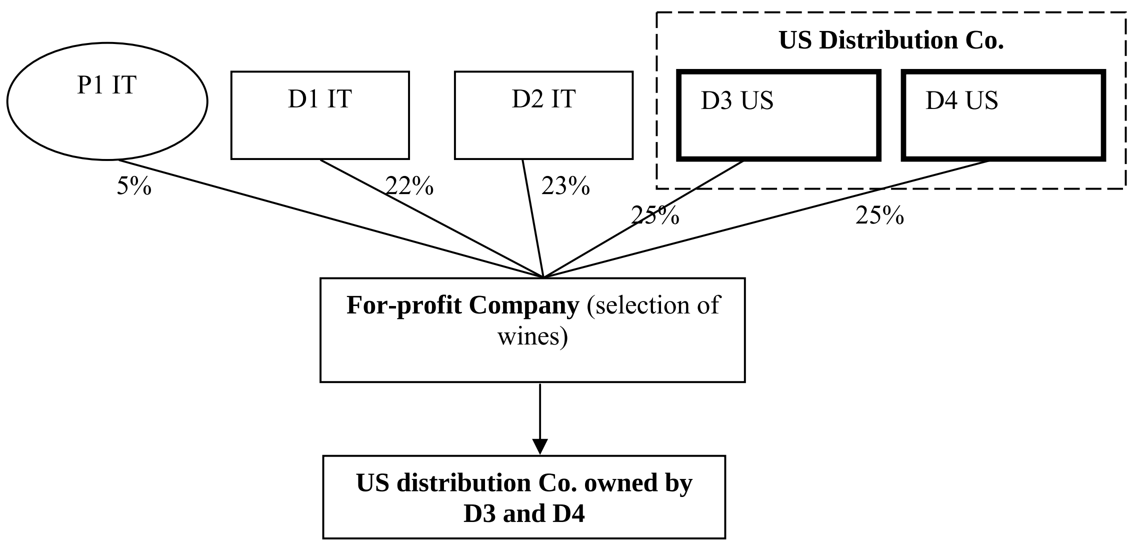
Purchase platforms as composed by large distribution chains and **networks of intermediaries** and other enterprises operating in the Ho.Re.Ca. channels (e.g. in the form of consortia in Italy) are important tools influencing the governance of the distribution (and production) chain in many respects: (a) they enable the reduction of transaction costs connected with distribution contracts negotiation; (b) they favour coordination between production and distribution, mainly through knowledge transfer along the chain; (c) they produce both standard and tailored services for the members of the networks.

An impact on the vertical dimension of the chain is then produced. Indeed, this coordination may reinforce the asymmetry of power already existing in the relationship between production and distribution, making it more difficult for small producers to access these channels, or leaving them more vulnerable and exposed to risks of abuse.

There may be some implications of this process at the **international level** as well. Since most of the large distribution chains are multi-national enterprises, possible unfair practices may be spread in several countries, while national legislation, if in any way effective at keeping the risk of abuse under control, may fail to do so at the international level. A need for international regulation, also by means of soft law or self-regulation, has been expressed by those interviewed, and detected by the research[150].

Other types of networks among distributors are formed at the international level and are direct to coordinate the activity of intermediaries already operating in different countries in order to ensure a comprehensive wine portfolio for a given market or for a given retailer, particularly in the LSD segment. Few examples have been found in the form of either contractual or organisational networks (see fig. 15 for an example of corporate network for the distribution in the US).

Fig. 15 – Transnational network for distribution: for-profit company accessing extra-European market (percentages are shares in the for-profit company)



5.3. The role of networks in the governance of the distribution chain

The research shows that the power asymmetry between final producers and distributors is still a major obstacle for the competitiveness of European wines in the global market.

Economic dependence is strongly influenced by the structure of the market and the level of fragmentation of the production as compared with distribution enterprises. The existence of specific investments by final producers is also relevant for explaining this asymmetry, though to a minor extent (see tab. I and J).

150 See COM (2009) 591 on A *Better Functioning of Supply Chain in Europe* including SEC(2009) 1445; SEC(2009) 1446; SEC(2009) 1447; SEC(2009) 1448; SEC(2009) 1449; SEC(2009) 1450.

Case studies also help to identify a few hypotheses of abuse of economic dependence, and to highlight that, when the relationship between final producers and distributors is embedded into or connected with a network relation, then economic dependence and risk of abuse are relatively low (see tab. 10 and 11).

Tab. 8 – Economic dependence in distribution in contractual strategic relationships

and within networks – answers of final producers

	Enterprises involved into strategic relationships*	Enterprises involved into contractual networks among coordinated bilateral contracts**
Percentages of enterprises which made investments not employable in other commercial relationships	15.40%	33.30%
Respondents	**97**	**6**
Percentages of enterprises for which partners are irreplaceable because in the relevant market there are only a few buyers	55%	50%
Respondents	**100**	**6**
Percentages of enterprises which answer that more than 75% of the purchases depends on just one strategic buyer	4.20%	0
Respondents	**95**	**4**

Tab. 9 – Economic dependence in distribution in contractual strategic relationships

and within networks – answers of distributors

	Enterprises involved into strategic relationships*	Enterprises involved into contractual networks among coordinated bilateral contracts**
Percentages of enterprises which made investments not employable in other commercial relationships	20%	25%
Respondents	**20**	**4**
Percentages of enterprises for which partners are irreplaceable because in the relevant market there are only a few sellers	50%	25%
Respondents	**16**	**4**
Percentages of enterprises which answer that more than 75% of the sales depends on just one strategic seller	5.20%	0
Respondents	**19**	**4**

* = *The percentages refer to enterprises which made investments not employable in other commercial relationships with strategic partners. A strategic relationship is a legally identifiable relation which is characterised by a high level of stability (a conventional threshold of three years has been adopted) together with a concurrent element showing the critical value of the relationship for the enterprises' activity, this being the hard replaceability of one or all the parties, the use of co-determination practices as regards the technical and economic elements of the transactions (e.g. wine making methods), the exclusive feature of the relationship, as excluding concurrent relations with other partners for the same type of transaction.*

** = *The percentages refer to the number of enterprises taking part in a contractual distributive network. The answers concern the strategic relationship as defined above.*

Tab. 10 - Abuse of economic dependence in distribution in contractual strategic relationships

and within networks – answers of final producers

	Enterprises involved into strategic relationships	Enterprises involved into contractual networks among coordinated bilateral contracts
Percentages of ent. undergoing an abuse	23,9%	0
Percentages of ent. collaborating with counterparty	13%	40%
Respondents	**92**	**5**

Note: percentages are referred to the number of enterprises interviewed which experienced an abuse of economic dependence by one or more strategic partners or which enjoyed a collaboration with one or more strategic partners.

Tab. 11 – Abuse of economic dependence in distribution in contractual strategic relationships

and within networks – answers of distributors

	Enterprises involved into strategic relationships	Enterprises involved into contractual networks among coordinated bilateral contracts
Percentages of ent. undergoing an abuse	15%	0
Respondents	**20**	**3**
Percentages of ent. collaborating with counterparty	25%	66,7%
Respondents	**20**	**3**

Note: percentages are referred to the number of enterprises interviewed which experienced an abuse of economic dependence by one or more strategic partners or which enjoyed a collaboration with one or more strategic partners.

6. The Emergence of Networks and the Service Supply

The research project has examined the role of service supply in enhancing the effectiveness and competitiveness of national and European wine markets. The effectiveness and efficiency of service supply is a key element for the development of the wine sector. Domestic and international markets require different services and approaches. Besides standardised services (such as the ordinary maintenance of equipment and machineries) many non-standardised services are needed by the actors in the production and distribution chains.

Different types of services have been considered (in particular: innovation-related services, technical support for agronomic and oenologic practices, services for internationalisation, services for compliance with legal and self-regulated requirements concerning production).

Services may be provided by different actors: (a) internal production of services by the enterprise itself; (b) professionals or service enterprises operating in the market; (c) public entities; (d) agricultural, industrial, trade or inter-branch organisations operating in the wine sector.

We have loosely distinguished between standardised and non-standardised services and asked how service provision was allocated among different actors. The underlying assumption of the research question based on existing literature was that a labour division between associations and markets might have been based on the degree of specialisation: i.e. the higher the level of standardisation, the more likely that the service would be provided by an association.

6.1. Internal v. external supply of services

We have found evidence that no strong direct public supply of services exists. Exceptions are related to research and technology where universities and research centres are involved. States or local authorities delegate service supply to specialized private organisations. An important role is played by inter-professional organisations and producers' organisations for technical, normative and administrative matters. These organisations are involved in the general provision of standardised services. Markets for service supply do not really exist in the first part of the chain for grape growers, but they increase along the chain moving from agricultural to industrial activities. Service supply by market entities is available to a limited extent for wine makers and distributors.

We have found that services are mainly provided by external actors, trade associations, professionals and market players (see tab. 12).

When firms have answered that services are mainly provided inside the firm, there are two different clusters:

- those who do not have resources to buy external services (small enterprises);
- those, a minority, which do have resources to produce services internally. As we shall see, many of these enterprises are those which adopt the cooperative model.

Tab. 12 - Providers of services (in bold the higher percentages)

		Italy			Loire	Douro	Valencia
		Trento	Verona	Catania - Ragusa			
Innovation-related services	Not required	22,9%	3,3%	6,0%	30,0%	33,3%	**47,1%**
	Provided by the firm itself	25,7%	43,3%	**48,5%**	23,3%	33,3%	29,4%
	Acquired outside	**51,4%**	**53,3%**	45,5%	**46,7%**	33,3%	235%
Technical support (in production)	Not required	28,6%	6,7.%	6,0%	33,3%	36,7%	23,5%
	Provided by the firm itself	25,7%	40,0%	36,4%	6,7%	23,3%	**64,7%**
	Acquired outside	**45,7%**	**53,3%**	**57,6%**	**60,0%**	**40,0%**	11,8%
Technical assistance for legal compliance procedures	Not required	25,7%	10,0%	3,0%	36,7%	33,3%	35,3%
	Provided by the firm itself	22,9%	16,7%	36,3%	20,0%	23,3%	29,5%
	Acquired outside	**51,4%**	**73,3%**	**60,6%**	**43,3%**	**43,3%**	35,3%
Services for internationalization	Not required	31,4%	40,0%	8,80%	26,7%	33,3%	41,2%
	Provided by the firm itself	28,6%	26,7%	**58,80%**	13,3%	26,7%	17,6%
	Acquired outside	**40,0%**	**33,3%**	32,40%	**60,0%**	**40,0%**	41,2%
Respondents		**35**	**30**	**33**	**30**	**30**	**17**

The differences among countries concern more the nature of services than the identity of the suppliers. Some differences exist in relation to more mature industries such as the French and the Italian, where evidence of services market supply has appeared.

The Hungarian example shows the highest degree of differentiation between large enterprises, relying primarily on their own resources, and small enterprises relying entirely on the service provisions by external actors, primarily wine communities.

More particularly, with regards to the different forms of services supply, the research shows:

(1) a limited role for **public entities,** as operating in the area of research and innovation-related services (though important structures exist in Trentino and the Loire, some inefficiency in knowledge transfer to small enterprises may arise);

(2) the role of **inter-branch and other sectorial organisations** as providers of quality standards, monitoring and rating activity, marketing services, promotional services (important in all the examined areas and mostly focussed on standard services);

(3) the role of more **focused and selective networks of enterprises**, mainly operating as promotional devices for members (this model is quantitatively less diffuse but important examples have been identified in Portugal and Italy);

(4) the role of **inter-firm networks as operating along the production and distribution chains** and combining the function of exchange of goods with that of service supply, the latter being instrumental to the former (so in the case of most cooperatives and many of the vertical chains as mentioned above, e.g. for the provision of logistic services within distribution networks); given the connection with the production or distribution functions, the supplied service is normally tailored to the structure and need of the chain;

(5) the role of **more specialised networks, solely providing services**, both standardised and not standardised: this is an isolated example in the Loire (and in France in general), mainly connected with the functioning of Cuma (mentioned above).

6.2. The supply of services at different stages of the production and distribution chains

We then asked whether services were supplied by different actors along the supply chain. There is evidence that in the first part of the supply chain, within the grape growing, the importance of trade organisations and specialised bodies is significant. Moving downstream along the supply chain, the relevance of associations as service providers decreases and market supply increases. Individual enterprises size permits buying more sophisticated services concerning process and product innovation.

6.3. Service supply by final producers and retailers

A significant amount of services is provided by actors within the supply chain. Wine makers provide technical assistance to grape growers and the costs of these services is generally shared between the two. These are primarily agronomic services, focusing on knowledge about process innovation in grape growing. Retailers, producing private label wine, provide both technical specifications concerning quality and safety to grape growers or to wine makers. These are services associated with technical control procedures drafted by retailers and implemented by the different actors along the chain.

There are significant spillover effects between international and domestic markets. Private label wine is often produced for foreign markets but the knowledge acquired by the wine maker is transferred onto the domestic market in the relationships with grape growers.

6.4. Choice of governance and service provision

We then focused on the relationship between corporate governance and service production asking whether networks have comparative advantages over other forms for providing services to participating enterprises. Clearly they do this *vis-a-vis* market relationships which assume a mature market for services easily accessible to enterprises of different sizes. In relation to corporate groups, the boundary is harder to define since groups also often provide services for their participants.

6.5. The differences between cooperatives and other types of networks

We examined the differences between the cooperative network model and other models as suppliers.

Main research questions were:

- whether there were significant differences between the 'private' and the cooperative models, and within the private model
- whether networks are effective instruments in providing services to their members.

6.5.1 Service provision and the distinction between private and cooperative

The differences between service provision in the cooperative and private network model are, not surprisingly, remarkable.

The cooperative model in the grape growing and vinification indicates that cooperatives provide a large amount of services to their members. This is one of the main reasons for farmers to become members. The case of Trentino provides the clearest example of the implications of the cooperative model for effective service provision. In that model, there is not only the first-tier cooperative providing services to members, but often a second tier is created to permit smaller cooperatives to share services such as bottling and marketing. Thus, different services are provided according to the various tiers in which the network is organised. Further examples support this conclusion in the Douro region and in Valencia.

In the private model, service provision by the network to the participants is performed both when there are contractual networks and organizational networks, but in a more selective way. It is important to remember that the network form takes place for the production primarily of high quality wine where the importance of services concerning technology of production, product and marketing are relevant. In this framework, the wine maker, leading the network, provides services to the grape growers with which there are contractual relationships. No equivalent second-tier service provisions organisation exist, and the growth of small enterprises is much slower.

6.6. Networks as service providers

The last part of the analysis was devoted to the possibility of promoting networks as service suppliers in the form of cooperatives (as was the case of CUMA in France) or that of IEG (also in France) or consortia (mainly Italy, but to a certain extent Spain and Portugal).

In particular we asked

- the type of services for which they are particularly suitable (standardised services and/or non-standardised services);
- whether networks represent a viable response to enterprises' failures and market failures in providing these services;
- the circumstances in which it may be preferable to promote the constitution of inter-firm networks which are specialised in service supply, and the circumstances in which the supply by other inter-firm networks, supplying services while engaging in production or distributive activity, may be a sufficient and effective strategy to improve service supply.

The research shows that, for reasons connected with the interdependence among participants, service supply through goods-production and distribution networks might be more effective with regards to tailored services (innovation-related services, marketing services, services concerning the development of international strategies etc.). The frequent combination of this function of the network with other functions helps exploit interdependence, but may create some failures in terms of flexibility in cases in which the demand for services is more easily separable from the need which induces the participation into a productive or a distributive network (e.g. the need for oenological services may be separated from the interest of a grape grower to confer her grapes to the cooperative). In these cases, the creation of specialised networks might enlarge the offer and more effectively correct/cope with market failures.

7. *The Role of Networks in Promotion Strategies between Private Modelling and Public Support*

The new CMO-wine regulation devotes much attention to the promotion of European wines in third countries. The research has examined the networks used to promote domestic and European wines both within and outwith Europe. The main role is still played by trade associations and regional representatives of denominations of origins. Many *ad hoc* organizations have been created to manage "wine routes" in different domestic contexts. A *"European route of wine"* is still missing.

The research shows that inter-branch or other sectorial organisations devoted to promotional-related services are quite widespread. Their effective impact on the market is harder to evaluate. It is worth noting that these organisations are often structured on a territorial basis in a way that the global market fails to convey properly to final consumers. Incentives concerning promotion may not be perfectly aligned. While on the producers side and, more importantly, on geographical denomination, there is an incentive for collective promotion to improve the collective reputation of the denomination, a more selective approach is generally requested on the distributors and retailers' side. For example, a group of large distribution chains in the UK has expressed a clear refusal for fragmented promotional campaigns strongly supporting higher coordination among French promotional programmes[151]. Yet even among producers incentives concerning promotion and consequently the choice of legal form may differ according to size and products. A clear tension between a brand-based strategy and a geographical strategy may give rise to different networks for the promotion of domestic wine in Europe and for European wines in third countries.

The issue then involves two linked aspects: the modes of organising promotion (whether on a territorial or a different basis), and the definition of public policies allocating financial support for promotion. Although the CMO-wine regulation does not expressly underline the role of networks in these respects, some recent national secondary legislation follows this path[152]. As a result, an attempt to increase coordination of promotional activities among producers is emerging (in Italy one "temporary association among enterprises" and one consortium have been formed as a result of this policy). Whether these new structures will enhance the ability to take advantage of interdependence is a question of network design that seems deserving of further analysis.

The research helps to understand that, in the current context, territory is not the only basis for an effective promotional activity. Examples of national and transnational networks based on the economic value of their trademarks, as already recognised by the market at an individual level, or even on the family nature of their member's firm, suggest that innovative forms of promotional networks might be as, or more, effective. They may not only signal members' reputation, but also enact new collaborative mechanisms which could be used in different common projects in the areas of production and distribution. The role of networks as network incubators could generate important dynamics deserving increased attention.

---

[151] See "*Plan B for France. Proposal for a united campaign to promote the wines of France in the UK*", South Petherton, Somerset, UK, June 15, 2009.

[152] See "Programma nazionale di sostegno nel settore del vino" (available at http://www.politicheagricole.it/SettoriAgroalimentari/Vitivinicolo/default.htm, last visited 20.2.2010); Ministero delle politiche agricole, alimentari e forestali, D.M. 8-5-2009, Disposizioni nazionali applicative del regolamento (CE) n. 479/08 del Consiglio, relativo all'organizzazione comune del mercato vitivinicolo.

8. Networks and the Internationalisation of the Wine Supply and Distribution Chains

The countries included in the research are all relevant exporters of both bottled and bulk wine.

It should be mentioned that they are also importing countries. In addition to the traditional trading of bulk wine among producing countries, import of bottled wine has increased in more recent times.

Internationalization concerns several dimensions.

An important factor is related to the **internationalization of ownership,** both of land and enterprises. Yet for Hungary and, to a limited extent, Portugal, ownership of enterprises is generally in the hands of national entrepreneurs. In Hungary there has been a significant penetration of foreign enterprises during the privatization period (1989/1994). This expansion was subsequently made more difficult when legislation banning foreign ownership of land by individuals and companies was introduced.

A second dimension is related to the **market for corporate control**: the acquisition by enterprises of land and/or of enterprises located in other countries. Though quantitatively limited, this is an important dimension for the liberalization to be completed in Europe by 2015. We have found a few examples of pan-European groups owning wine-making enterprises in several countries, or of individual enterprises acquiring land or enterprises in third countries. Clearly a more concentrated industry operates at the distribution and retailers' level.

A third, limited phenomenon is the creation of **interstate European wine regions**. In Hungary at least two examples exist: one concerning the famous region of Tokaji where an agreement with the Republic of Slovakia has been reached concerning the creation of an interstate denomination (however, the agreement has not been implemented). A second example concerns the Soproni region where an agreement between Hungary and Austria permits Austrian wine producers to produce and market Soproni wine in Austria and third countries, on the basis of a collaboration with Hungarian grape suppliers.

Overall the internationalization of production in Europe is very limited, while patterns of European networks concerning the distribution and the relationships between production and distribution have been found (see tab. 13).

While the overall phenomenon is rather limited, significant differences exist among the case studies.

Tab. 13 - Internationalization of production - Percentages of enterprises that conduct (part of) their production activity abroad or collaborating with foreign enterprises

Internationalisation of production	Trentino	Verona	Sicilia	France	Portugal	Spain	Tot.
Yes	13.30%	30%	3%	16.70%	14.80%	18.80%	**26**
No	86.70%	70%	97%	83.30%	85.20%	81.30%	**140**
Respondents	**30**	**30**	**33**	**30**	**27**	**16**	**166**

The forms of internationalisation of production are mainly contractual, and to a limited extent consist in vertical integration. No evidence of the creation of organizational networks has emerged. As expected, the internationalization occurs primarily among larger enterprises including, more recently, cooperatives.

Internationalization of distribution is more relevant with high percentages across the case studies (see tab. 14). Internationalization of distribution occurs primarily through contractual agreements and, to a limited extent, with organizational networks. No evidence of vertical integration has been found in the case studies.

Tab. 14 - Internationalization of distribution - Percentages of enterprises

that have relations with foreign enterprises for distribution purposes

Types	Trentino	Verona	Sicilia	France	Portugal	Spain	Total
Yes	64.50%	73.30%	87.90%	93.30%	82.80%	81.20%	**136**
No	35.40%	26.70%	12.10%	6.70%	17.20%	18.30%	**33**
Respondents	**31**	**30**	**33**	**30**	**29**	**16**	**169**

8.1. Europeanisation of wine industry: patterns and puzzles

In the context of the research, internationalization concerns both the Europeanisation of the wine industry, and the relationship with non-European markets and industries. Clearly the legal and institutional framework differs, and due consideration has been given to the process of Europeanisation, in particular focusing on the previous regulatory ‘constraints’ and on the current framework oriented towards a more structured, yet still partial, liberalization.

The CMO regulations, both the past and the present, have addressed the regulatory framework but have given little or no attention to the governance perspective i.e. the effects that the Regulation should have on the industry structure and on the supply chain, and the impact on the incentives for enterprises to reinforce the competitiveness of European wine. The research tries to fill these gaps by looking at which ‘modes’ of industry’s internationalization are taking place, and which legal and socio-economic obstacles prevent the creation of a European wine industry, to the extent that this is a desirable goal.

Essentially three different strategies have been identified with the aim or Europeanising the wine industry: two group-based and one network based.

Within the **group based strategy** two rather different models exist:

- one, highly centralized, where the decision making process is in the hands of the holding company and many national subsidiaries are delegated an implementation task. Choices concerning production and distribution are defined by the holding company and then implemented at a national level. This model often includes a few production subsidiaries and a few distribution subsidiaries.
- A different model is that in which the holding company plays a coordinating function with some shared policies among the subsidiaries, but a relatively high level of independence of the national enterprises. This model is an intermediate position between a group and network. It is a group if seen from the perspective ownership but a network when looked at from a governance perspective. National subsidiaries have the power to negotiate not only prices and quantities but also marketing policies with domestic retailers and often with retailers in other countries. They have a duty to cooperate among themselves to access domestic markets but, if an offer of cooperation is rejected, they can find alternative partners in the market. They have privileged access to the markets of the other subsidiaries and can offer retailers in LSD a wider portfolio of products. No special rules exist to access markets where subsidiaries do not exist.
- The other model of Europeanisation is that of a **network**, both organizational and contractual, upon which the rest of the section is focused.

The research questions were related to both modes and instruments of internationalization, distinguishing between production and distribution. In particular we asked when contractual networks were preferred over organisational networks and why.

8.1.1. Internationalization of production: patterns and puzzles

The level of internationalization of production is much lower than that of distribution. Given the d.o.p.-based regime, the examined countries are slowly moving from a local-regional perspective to a national one, where wine makers either by way of generating groups through the acquisitions of brands and labels or with the creation of networks have expanded their production capacities. This is more true for France, Italy and Spain, while in Portugal and Hungary a national wine making industry, encompassing several d.o.p., has been in place for a long time for different historical reasons.

Within these processes we have found several networks of domestic producers to produce a new wine for the international market (in particular in France and Italy, where E.i.g. – in the former case - or limited liability companies have been used). A more differentiated array of examples concerns the production of new wines for the American market (with the main examples concerning networks involving enterprises from north Italy or Valencia). More frequently alliances are designed to access the international market with wider product portfolios. In this case, they are concluded between enterprises producing wines that are not (yet) perceived to be in competition.

In this context we observe alliances among producers or networks created by intermediaries.

The role of international intermediaries is still relatively minor. Unlike domestic markets, where intermediaries have a significant function, in international markets this function is still primarily performed by importers which operate at the national level.

Retailer-driven international networks are composed of intermediaries which are selected for their knowledge of the European domestic market. In case in particular, a large American retailer has created a network of bilateral contracts with three European intermediaries which have ‘control’ over the main European markets. The three act in coordination and exchange information and clients making individual and collective proposals to the American retailer.

Similar models are created by European retailers which tend to centralize the decision making more and lower the level of coordination among intermediaries located in different European producing countries.

8.1.2 Internationalization of distribution: patterns and puzzles

LSD, Ho.Re.Ca., online selling through specialised intermediaries, direct selling including online.

The research questions concerned the structure of contracting practices, the incentives to create integrated groups or networks between distributors and producers. Alternative forms of distribution to shorten the supply chain have been examined looking at trading platform designed and managed by specialized intermediaries outside traditional LSD and Ho.Re.Ca.

We shall distinguish relationships between LSD and producers and those among producers to create direct access to retailers, shortening the supply chain.

i. Relationships between producers and LSD

No networks have been found. Relationships are contractual. Contracts are short term even if business relationships tend to be long term. Distributors impose short term contracting strategies to be able to adapt to market changes and to take advantage of competition among producers.

Common findings concern the strong asymmetry of power between producers and distributors. Some difference relates to sparkling wine, where some producers have more contractual power because there is less fragmentation and more brand-based models.

No significant differences among the five countries is found in the still wine market. An increasing competition among wine producers of different countries for low price wines where substitutability is high and the crisis has made a change. Competition is still high within national systems for high premium wines.

Contracting practices are generally different from those in the production context. Contracts are written and more detailed but highly incomplete. Completion is often left to a different level, more local depending on the contingent market.

Contracting structure is divided between a framework part concerning price structure, while the selection of wines is normally determined at a second level.

Even when LSD are present in several countries, but for a few exceptions, the general practice is decentralized contracting. A French exporter dealing with a British retailer which is present in eastern Europe will negotiate directly with the local representative of the retailer to define prices, quantity and even marketing conditions.

The practice of European contracting, in particular that of the so-called Euro-bonuses, is quite limited. It is unclear whether we are moving towards a more centralized contracting structure with the 'internationalization of consumption'.

ii. Relationship between producers and Ho.Re.Ca.

At the international level, the relationship between producers and distributors of the Ho.Re.Ca. channels is mainly intermediated by importers and, especially for neighbouring countries, by sales agents. We found very limited evidence of horizontal networks for accessing foreign Ho.Re.Ca. channels, thus shortening the distribution chain. The role of specialised intermediaries should be emphasised. Although mainly developed at domestic level, very few examples of contractual networks developed at European level have been identified.

iii. iv. Relationship between producers and on line intermediaries. Direct selling at the international level

Online sales are still limited in the wine sector (though with differences among countries, being more widespread in France than in Italy). However, their importance is increasing and is destined to play a relevant role in the international contexts, reducing costs of intermediation and favouring some coordination of the wine offer, as this is still quite fragmented in the global market. Few producers start to organise their own Web sales platform, while horizontal networks among producers have not been found. Again, the role of specialised intermediaries, able to combine their traditional distributive function with the use of technology and the supply of specialised services, should open new perspectives for the competitiveness of the European wine sector.

9. *Comparing Different Models of Inter-Firm Networks: What Is the Role for Legal Forms Architecture*

The research analyses comparatively the different legal forms of networks as found within the case studies. More particularly it aims at examining when contractual and organizational networks are used along the production and distribution and whether these models differ across countries.

We asked whether there was a correlation between the form and the function of the networks and whether it varied across case studies. Clearly the use of networks differs between production and distribution, but more importantly between parties located in different position of the supply chain and parties that occupy the same position within it.

Along the supply chain vertical networks are primarily contractual. Both the network relationship between grape growers and wine makers, and that between wine makers and distributors takes the contractual form. Vertical contractual networks are sometimes combined with the creation of a corporate entity directed at stabilizing the relationship without necessarily linking the duration of the entity with that of the contractual relationships. These corporate dimension ranges from cross ownership to the creation of a new company.

Horizontal networks in form of cooperatives characterize the first part of the chain. Many agricultural cooperatives among grape growers emerge. The cooperative form is substituted with the for-profit form while moving along the chain downstream towards distribution.

Indeed, horizontal networks among enterprises performing similar functions, as wine producers or distributors, primarily take the corporate form. When alliances among parties in the same part of the chain are created, the risk of shirking and opportunistic behavior is higher and contractual safeguards may be insufficient. Often they are created to access new markets or to innovate, and the corporate entity preserves specific investments and protect collective reputation more strongly than contractual networks under current legislation are able to do.

Comparative analysis shows that there is relative homogeneity in contractual networks while often different legal entities are deployed when organizational networks are chosen.

Contractual networks differ between production and distribution. In the former case, the contractual relationships are stable but contracts are mainly oral (with the exception of France for regulatory reasons) and not detailed. Contractual networks between wine makers and distribution are less frequent but, when they are chosen, contracts are generally written and more detailed, although they are incomplete and subject to completion at a later stage. They differ significantly depending on the distribution channel (LSD or HO.RE.CA.) and when online selling by professional intermediaries emerges.

Organizational networks are more country-specific. Cooperatives are used or even dominant in certain areas, and almost nonexistent in others. In France the EIG exists mainly in the national form, while in the other Mediterranean countries consortia are relatively more frequently used.

9.1. The relationship between cooperatives and private models

When the presence of the cooperative model is significant we have analysed the relationship between private entrepreneurs and cooperatives. As underlined above, we have identified three patterns which are sometimes coincident with different temporal stages: cooperation, competition, and integration. The latter, shaped by the existence of a legal framework that allows cooperative and for-profit companies to integrate,[153] has developed in northern Italy but has been prevented from developing elsewhere by legislation prohibiting mergers between cooperatives .

When the two models coexist we have noticed important reciprocal influences. In particular, the insurance function of cooperative networks are partly internalised in the contractual networks formed by grape growers and wine makers. When cooperatives are strong, the private wine makers tend to establish contractual relationships that, to a limited extent, mimic those between cooperatives and members. Contracts are more stable, prices tend to be above market, wine makers provide services and technical assistance. These phenomena grow with the increasing power of cooperatives since private wine makers have to face higher competition to attract grape growers.

[153] See that in the Portuguese case this is not allowed.

Cooperatives, on the other hand, seem to learn efficiency by structuring models that combine participatory requirements to the governance with managerial decision making, especially when there is a large size and the cooperative enters the distribution with the creation of for-profit subsidiaries.

When there is a balanced presence of the two models, we observe some degree of convergence between the two models and some level of integration when legislation permits.

10. Some Preliminary Conclusions

'We were looking for islands and we discovered the boundaries of the ocean.'

When we designed the research, the expectations of finding inter-firm collaboration in the wine industry were relatively limited. We thought the main task was to identify the different shapes of the filière and how its governance could enhance efficiencies, preserving the values and the identity that characterize the European wine industry in such a distinct way. We found more networks than expected but very different along the supply chain and across countries. They are driven by various factors: upstream the regulation of grape growing and ownership fragmentation, downstream, market changes in wine consumption, the strong concentration of large scale distribution (LSD), the transfer of market share from traditional HO.RE.CA. to other channels, particularly on line sales by specialized intermediaries.

Patterns of wine consumption have changed and consequently competition has driven away some producers and increased the market powers of others. The international map has been transformed in the last decade. The challenges from non European producers call for responses that will prove superior to the products coming from other continents, while keeping alive the distinctive features of European wines.

The difference between fragmentation in the upstream part of the chain and concentration downstream is striking. Clearly the degree of segmentation of grape growing and, to a large extent, wine making will have to be reduced to improve efficiency and competitiveness. The formation of national groups moving beyond regional production is fairly developed. European multinational wine makers, on the contrary, are very few. Different patterns of concentration in the upstream part of the supply chain may be envisaged in the near future: one, based on ownership integration and the creation of groups; the other grounded on horizontal networks among producers primarily in d.o. or vertical networks promoted by retailers in the private label.

Concentration downstream is producing some degree of harmonization and contributes to increase of common standards. Now many producers from different countries participate to bids concerning private labels and have become players of a single market. Whether the means deployed by retailers to harmonise market practices are approved by the industry and in particular by producers is a highly debated issue; clearly there is a strong degree of interest misalignment along the supply chain.

The differences increase if we move to a country specific analysis and even more within the same country, across different wine regions. This is a well known specificity of the European wine industry that makes comparative analysis harder and very context dependent. Producing countries display important divergences and especially the 'new Europe' presents distinct and specific features, hardly comparable with consolidated agro-industrial systems.

The CMO reform caught us in the middle of the research, what we have observed is mainly the outcome of the previous regulatory framework. We have been working on the hypothesis that there is a correlation between the regulatory frame concerning the supply chain in the wine industry and its governance. We believe that the CMO went only half way: redesigned the regulatory frame - with high, perhaps too high, degree of delegation to MS which in turn delegate rule making, monitoring and enforcement to national or local producers – without addressing the governance questions. Many institutional questions were left unanswered: Is the predominant geographic and territory based

European approach a driver or an obstacle for the creation of inter-firm collaboration? Is that regulatory framework appropriate to induce the transformations in the supply chain that can improve the position of European industry worldwide? Is the legal framework for supply chain coordination adequate? Is there a sufficient menu of options for national enterprises willing to create European alliances to enter new markets? We believe that a better and more uniform set of forms of collaboration schemes ranging from purely contractual to organizational is needed. Lack of homogenous principles and practices may undermine the goal of increasing the level of European market integration in the wine sector. We are not advocating a legislative intervention. Rather this is a call for a stronger coordination among countries, in particular producers, with the significant contribution of the Commission. New modes of governance developed after 2000 could improve the creation of a European logistic network that can reduce the costs of the final product. But the applications of new modes of governance can be numerous. In particular the need to rebalance the contracting power in the food industry, including the wine segment, has been the focus of recent European proposals in order to promote private regulatory agreements between trade associations. This framework should provide a better negotiating platform with drafting standard contracts between producers, distributors and retailers.

What are the policy implications? We present here a brief and incomplete summary to start the debate.

Networks and similar forms of inter firm collaboration require targeted industrial policies. Context specificity still calls for national and local policies but an increasing European dimension is necessary. There is a need to combining horizontal policies across the chain with specific ones addressing different segments along the chain. It would be highly desirable for example that the general policies concerning innovation and competitiveness could be specifically targeted to the wine industry and located at the intersection between this industry and other related areas like tourism, culture, environment.

The development of both domestic and international policies need to be devised. But within Europe a sharper distinction between intra-community and third countries policies should be designed, within the limits of international trade law. European wines will continue to compete within Europe but wine makers need to cooperate to enter new markets.

The competitiveness of European industries and their products strongly depends upon a radical shift towards service oriented policies. Too little research and innovation characterizes production; too little innovation has emerged in marketing and reaching out different classes of consumers. The necessity to provide final consumers with more information, easier to access calls for a paradigmatic change in Europe. But these changes have to transform also the strategies of penetration into non European markets: both the traditional, like US, and the emerging like China and India. A service based policy for the wine industry needs to distinguish between production and distribution. In the former technology transfer, scientific innovation, links between research institutes across Europe call for targeted investments. A stable network of research institutes and laboratories focusing among other goals on the transfer between Western and Eastern European countries is necessary. Given the (small) size of the average producers access to services is quite expensive and only a network of public-private institutions across Europe can trigger a significant change in the production practices of the core segment of wine producers especially for those products which are more vulnerable to international competition.

Inter firm collaboration needs to take place both horizontally among producers and vertically between producers, distributors and retailers.

Opportunities for change exist but the risk to lose the last clear chance is ahead of us.

Concluding Remarks: A Policy Perspective on Inter-Firm Networks in the European Wine Industry

by Eugenio Pomarici

1. Introduction

The research *Inter-firm networks in the European wine industry* displays a rich number of networks of firm at different level of the supply chain in the European wine industry.

Indeed, from the technological perspective the wine industry looks as an ideal case as the whole process of wine production and distribution is highly scomponible and the optimal scale of the processes at the different stage of the supply chain could be different.

More generally, farmers - typically less concentrated in number and in terms of geographical location than the traders they supply - have historically organized several forms of cooperation (Rama, 2010).

The richness of the findings makes the research a very important reference for entrepreneurs, professional bodies and policy makers.

Actually the research shows a reality that is different from the common perception and in chapter 10 is written: <We found more networks than expected but very different along the supply chain and across countries>. For many reasons the attention of scholars and professional in the past was not directed towards in-depth analysis of the structure of the industry and this explains why the research group discovered something different from what they was expecting. The research *Inter-firm networks in the European wine industry* imposes on those who are interested in wine industry to change their way to think to this industry. In this perspective, economists are called to study more carefully, with qualitative and quantitative tools, how the industry works and how agents organize their relations.

After the exhaustive and detailed documentation of results of the research *Inter-firm networks in the European wine industry* contained in the previous pages, this closing text aims merely to stress the usefulness of the networks in the wine industry and, therefore, to justify policies for the networks diffusion, giving some guidance on how these policies should be organized.

2. Do Networks of Firms Help?

Inter-firm networks have been theoretically analyzed by scholars belonging to the Neo Institutional Economics and have been considered a hybrid organization of production and distribution because they represent intermediate forms to arrange economic transactions between the hierarchical model of the firm and the pure market (Williamson, 1985; Williamson,1991; Menard, 2006).

The reason of emerging of hybrid organization of production and distribution is linked to the peculiarities of real markets, particularly in the developed economies, and the necessity to manage in an effective way the transaction costs generated by the organisation of production and distribution processes.

Hybrids develop because markets are perceived as unable to adequately bundle the relevant resources and capabilities (Teece and Pisano, 1994), even though integration would reduce flexibility, create irreversibility, and weaken incentives (Menard, 2006). The coordination of independent firms in a hybrid organization involves therefore relevant problems, largely discussed in the literature, linked to the governance models, the risk of unfair behaviors, the conciliation between competition and cooperation among partners. Actually, the difficulties involved look so relevant that the emerging of an inter-firm network appears very improbable. The reason of the emergence is in the technical change and in the increase of relevance in many sectors of really specialized assets and competencies and the difficulties to acquire such assets and competencies. Therefore “when investments among partners are specific enough to generate substantial contractual hazards without justifying integration and its burdens, and when uncertainties are consequential enough to require tighter coordination than what markets can provide, parties have an incentive to choose hybrid” (Menard, 2006, p. 31). The state of variables determining the condition of convenience for the establishing of a hybrid organization of production and distribution is evidently strictly linked to the subjective condition of agents and therefore the actual implementation of an inter-firm network is really path dependent.

Inter-firm networks are also object of a specific interest of the managerial literature where it is emphasized how strategic alliances among firms can determine relevant benefits in terms of economies of scope (Barney, 2002). It is pointed out that the fundamental shift in the 21th century is from a dyadic perspective of inter organizational exchange relationships toward a network perspective of value creating trough interorganisational networks. In addition to the traditional buyer-supplier constellation, the following are becoming relevant: integrated distribution channels, brand networks, technological innovation and product development networks (Achrol and Kotler, 1999; Moeller and Rajala, 2007). Nevertheless the managerial literature underlines how managing business networks appear to be a difficult issue, given that an estimated 60% of partnerships fail (Spekman *et al.*, 1999; Ritter *et al.*, 2004).

The indications coming from the theoretical analysis and from the managerial studies have been widely accepted by the European industrial policy guidelines. The Entrepreneurship and Innovation Programme[154] takes as a distinguishing feature the actions to support, improve, encourage and promote the creation of an environment favorable to SME cooperation, particularly in the field of cross-border cooperation, assuming that networking between stakeholders is the key to facilitating the flow of knowledge and ideas that are necessary to strengthen the competitiveness of SME.

The Programme provides for measures to develop SME cooperation for fostering services supply, sector-specific innovation, the coordination and development of their economic and industrial activities. The strategic importance of inter-firm networks, particularly for the enhancement of SME competitiveness is recognized also by the *Europe 2020 Strategy*, as clearly indicated in the communications related to the European industrial policy for the next years[155].

3. *Inter-Firm Networks in the Wine Sector: CAP Prescriptions and Indications coming from the Industry*

The attention paid to the issue of networks is shared also by the structural side of the Common Agricultural Policy. The introduction to the Rural Development regulation (Reg. 1698/2005) claims that in a context of increased competition it is important to encourage cooperation between farmers, the food and the raw materials processing industry and other parties in order to allow the agriculture and food sector to take advantage of market opportunities through widespread innovative approaches in developing new products, processes and technologies. The implementation of these principles is delegated to forms of integrated planning, according to the so called Leader approach, with the objective to se up local, inter regional and transnational collaborative forms among actors of the agro-food system. Unfortunately, despite good intentions the actions financed by the rural development policies are not resulting in remarkable results, yet, in terms of generation of inter-firm networks.

[154] Decision No 1639/2006/EC of the European Parliament and of the Council of 24 October 2006 establishing a Competitiveness and Innovation Framework Programme.

[155] *An Integrated Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage*, Communication from the Commission to the European Parliament, the Council, the European Economic And Social Committee and the Committee of the Regions, COM(2010) 614

Also the wine regulation inside the Single Common Market Organisation (reg. 1234/2007) assigns a role to inter-firms networks in the two forms of producer or inter-branch organisations.

The producers organisation – a form of horizontal integration - should: (a) promote and provide technical assistance for the use of environmentally sound cultivation practices and production techniques; (b) promote initiatives for the management of by-products of wine making and the management of waste in particular to protect the quality of water, soil and landscape and preserving or encouraging biodiversity; (c) carry out research into sustainable production methods and market developments; (d) contribute to the achievement of support programmes defined by each Member State (art. 103i, reg. 1234/2007)

The Inter-branch organisations – a form of vertical integration – should pursue specific aims, which may relate to (i) concentrating and coordinating supply and marketing of the produce of the members; (ii) adapting production and processing jointly to the requirements of the market and improving the product; (iii) promoting the rationalization and improvement of production and processing; (iv) carrying out research into sustainable production methods and market developments.

Moreover, inside the national support programmes some measures are included which could potentially open space for the development of new inter-firm network.

The measure supporting the administrative costs of setting up mutual funds directly requires the existence of a network but currently is not active in any Member State.

The measure supporting plans to promote European wine on third-country markets and that supporting tangible or intangible investments in processing facilities, winery infrastructure and marketing could both stimulate strategic alliances among grape growers, wineries and operators of the intermediate distribution, but no rules in the base regulation push in this direction. In Italy the application of the measure supporting promotion on third countries has stimulated organisation of inter-firm networks; the measure supporting investment should become active in the next future but probably without giving space to inter-firm networks.

Actually the wine regulation inside the Single Common Market Organisation focuses only on activities; the regulation does not give any indication about governance forms or incentives nor financial incentives.

It is clear that currently the pressure determined by the Common Agricultural Policy toward the diffusion of inter-firm networks is not sufficient. Some evidence concerning this statement comes from the results of a Delphi survey carried out in Italy (Mariani, Pomarici, 2010) and from the seminars organised to discuss outcomes of the research documented in this working paper.

The panel involved in the Delphi survey and the entrepreneurs and officials belonging to the wine professional bodies involved in the *Inter-firm network* reserch seminars share the opinion that inside the European wine industry there are too few inter-firm networks and that a larger presence of these networks could enhance in a substantial way the competitiveness of the industry. The common belief is that the current situation can not be considered an <equilibrium> determined by the path dependency of inter-firm network development processes. Indeed, the wine market evolution has been so rapid that the European wine industry has to complete an adjustment process where there is space for growing processes of some firms via merging or acquisition and for the development of new inter-firm networks.

In such situation a strong demand for a networks based policy emerges in order to stimulate the structural adjustment of the European wine industry and to sustain the challenge of competitors outside the Union. Actually, what is inside the Common Agricultural Policy is not sufficient and the wine industry is suffering for a paradox: it is too complex to find solution to its problems inside the agricultural policies, but it looks not enough industrial to be encompassed in the industrial policies.

It is a responsibility of policy makers (at the national and EU level) and professional bodies representing the European wine industry to discover the way to set up such policy.

4. *A Policy for Inter-Firm Networks in the Wine Industry: Some Remarks*

As already stressed at the end of Chapter VI, networks and similar forms of inter firm collaboration require targeted industrial policies, able to face normative aspects, information and motivation of relevant actors, combining horizontal policies across the chain with specific ones addressing different segments along the chain.

The issue is too complex to be dealt with exhaustively in this text, but it is possible to outline some points.

A policy in support of the networks should certainly aim to neutralize the brake effect linked to the structure of the European wine industry and to the regulations concerning land ownership, wine production and inter-firm collaboration. Indeed, the panel involved in the already quoted Delphi survey declared that serious constrains for the diffusion of inter-firm networks are the dominance in the industry of small companies with a lack of adequate competencies, the difficulties in focusing possible common objectives among firms, the poor support from banks and professional bodies, the lack of reliable consulting services and public incentives. Regarding the transnational network of firms a perceived constraint is the poor knowledge about the contractual aspects. An industrial policy for the inter-firm networks has therefore to include incentives and services but to be really effective has to be able to modify positively the individual attitude of actors to set up inter-firm networks managing the problems of trust and of objectives.

Inter-firm networks are at risk of opportunistic behaviours - adverse selection, moral hazard and hold up – and this makes difficult network development independently of other endogenous and exogenous factors (Barney, 2002, Goodhue *et al.*, 2003; Rama, 2010). Aggregation between firms is the result of a complex social process and it takes place only when potential partners share a stable reciprocal trust. The key element in this context is the growing of reciprocal knowledge in the producers' community. Supporting a community to reach such result is obviously a very difficult task for a policy action but, nevertheless, not avoidable. Probably the involvement in the policy action of professional bodies could bring positive results.

The other problem to manage to enhance the inclination to set up network is related to the firm attitude to have clear objective as consequence of a mature ability to define the company strategy. Probably this is the crucial point as in the European wine industry the product orientation seems to prevail on the market orientation (Rabobank, 2003; Pomarici, 2005). The absence of a true market orientation is the real problem of wine SME, particularly when they are family business. But probably the same problem is present also in some of the larger companies. Without a clear strategy it is impossible to evaluate advantages and risk or disadvantages of strategic alliances or other for profit or non profit networks. A policy for inter-firm networks should therefore accept the challenge of spreading the strategic capacity in the European wine industry. It is necessary to understand that the diffusion of managerial skills must receive the same attention of the diffusion of skills in managing technologies and technological change.

An important objective for a policy for networks in the wine industry is also the diffusion of a new conceptual framework to plan and implement new inter-firm networks. This conceptual framework should be able to conciliate the already existent attitude to develop locally based networks with the urgency, in the globalised market, to develop other networks able to project companies outside their territories, in the national and international market. Indeed, wine companies have at the same time to preserve and enhance the competitive and distinctive potential of the territory where they are located and to establish effective link with final markets by integrated supply chains where agent from different areas are acting together.

Finally a short comment on which kind of inter-firm networks should be stimulated by an *ad hoc* policy. The research *Inter-firm networks in the European wine industry* clearly demonstrates how many types of networks are already existing, each addressed towards a specific aim. Many networks exist to react to one of the two relevant aspects of the evolution of the wine market: the consolidation in the retail sector. Large scale distribution in many developed countries trade about 70% of wine destined to home consumption. This phenomenon is not the only one to characterize the new market of wine. The other relevant change in the market is the increase of the demand for high price wine (super premium, ultra premium, *etc.*). The consumption of such wines was until the mid-eighties of last century limited to élite. Nowadays the market of wine sold in the retail for more than 15 Euro per bottle represents about 40% of the whole market, though they represent only 10% of the volume of wine sold. These wines are traded through peculiar distribution channels; the outlets of these wines – wine oriented restaurants, wine bars, specialized wine shops – are increasing in number and are enlarging the wine range they are offering to clients. Such change in the wine market is setting a new competitive space - with specific requirements in terms of logistic, information, customer services - that potentially may offer interesting opportunities for smaller wineries oriented to high value products. These wineries might enjoy a specific competitive advantage if they will be able to organise their supply chain through integrated networks able to fulfill the market requirements. Given the structure of the European wine industry and its qualitative potential, an industrial policy in favour of inter-firm networks should explicitly consider networks to compete in the upper end of the wine market.

Bibliography

ACHROL, R. S., & KOTLER, P., *Marketing in the network economy*, Journal of Marketing, 63(4), 1999, p. 146‒163.

AMSTUTZ, M. – TEUBNER, G., *Networks. Legal Issues of Multilateral Cooperation*, Hart Publishing, 2009.

ARRUNADA, B., *Contractual Allocation of Decision Rights and Incentives: The Case of Automobile Distribution*, Journal of Law, Economics, and Organization, Vol. 17, No. 1, pp. 256-283, 2001, Univ. Pompeu Fabra, Economics and Business Working Paper No. 424, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=224537, 2000.

ARRUNADA, B., GARICANO, L., VÀZQUEZ, L. *The Quasi judicial Role of Large Retailers: An Efficient Hypothesis of their Relation with Suppliers*, available at www.ssrn.com (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=224583), 2000.

BARNEY, J.B. *Gaining and sustaining Competitive Advantage*, Pearson Education, Upper Saddle River (New Jersey), 2002.

BELUSSI, F. – SAMMARRA (eds.), *Industrial Districts, Relocation, and the Governance of the Global Value Chain*, Cleup, Padova, 2005.

BELUSSI, F., *Creatività e routine nelle reti: business network, reti distrettuali, reti creative e catene globali del valore*, in A. Lopes – F. Macario – P. Mastroberardino (eds.), *Reti di imprese. Scenari giuridici e economici,* Giappichelli, Torino, 2007, p. 239 ss.

BLAIR, M.M. - O'HARA, E., *Outsourcing, Modularity and the Theory of the Firm*, mimeo, 2008, available at sito http://law.vanderbilt.edu

CAFAGGI F. – CLAVEL S., *Inter-Firm Networks across Europe: A Private International Law Perspective, in Contractual Networks,* in *Inter-firm Cooperation and Economic Growth*, edited by F. Cafaggi, Cheltenham Glos, Edward Elgar, forthcoming (2010).

CAFAGGI F. – IAMICELI, P. (eds.), *Reti di imprese tra crescita e innovazione organizzativa: riflessioni da una ricerca sul campo*, Il Mulino, Bologna, 2007, pp. 85-132.

CAFAGGI F. – IAMICELI, P., *The inter-firm networks in the European wine sector*, forthcoming (2010).

CAFAGGI F., '*Contractual Networks and the Small Business Act: Towards European Principles?*', 4 European Review of Contract Law 49 (2008), 495.

CAFAGGI F., *Contractual Networks, Inter-firm Cooperation and Economic Growth*, Cheltenham Glos, Edward Elgar, forthcoming (2010b).

CAFAGGI F., *Il contratto di rete. Commentario*, Bologna, Il mulino, 2009

CAFAGGI F., *Private Regulation, Supply Chain and Contractual Networks: The Case of Food Safety*, RSCAS 2010/10 (Robert Schuman Centre for Advanced Studies - Private Regulation Series) (2010a)

CAFAGGI, F., *Reti di imprese tra regolazione e norme sociali. Nuove sfide per diritto ed economia*, Il mulino, Bologna, 2004

CAMPBELL, D. - COLLINS, H. - WIGHTMAN, J., *Implicit dimensions of contract: discrete relational and network contracts*, Oxford: Hart, 2003

CESARETTI – GREEN – MARIANI – POMARICI (eds.), *Il mercato del vino. Tendenze strutturali e strategie dei concorrenti*, Angeli, Milano, 2006

CHAMBOLLE – SAULPIC, *Growers vs. Merchants Bargaining on the Price of Champagne Grapes and the Role of Contracts when Bargaining is Unbalanced*, Journal of Wine Economics, Vol. 1, No. 2, 2006, pp. 95-113

COUTO VIANA – LIMA RODRIGUES, *What Determines Port Wine Prices*, Journal of Wine Economics, Vol. 2, No. 2, 2007, pp. 203-212.

DEAKIN, S. – LANE, C. – WILKINSON, F., *Contract Law, Trusts Relations, and Incentives for Co-operation: A Comparative Study*, in Contracts, Co-operation and Competition, ed. by S. Deakin and J. Michie, Oxford, OUP, p. 105 ss.

DOSI – GAMBARDELLA – GRAZZI – ORSENIGO, *Technological Revolutions and the Evolution of Industrial Structures: Assessing the Impact of New Technologies upon the Size and Boundaries of Firms*, 3(1) Capitalism and Society Article 6, 2008.

EUROSTAT (2007). Cit. in Echange de vues sur la situation du marché vitivinicole, Commission Européenne, *Agri-C3*, 2008, Bruxelles

FEENSTRA, R.C., *Integration of Trade and Disintegration of production in the Global Economy*, Journal of Economic Perspectives, Vol. 12 (1998), n. 4, Fall, pp. 31-50.

FVM (2008) : www.fvm.gov.hu /Infotéka/Termelői Csoportok/Elismert termelői Csoportok/Végleges állami elismeréssel rendelkező termelői csoportok 2008. szeptember 30-án (*List of Definitively Recognized Producers' Groups by Hungarian State on 30th September 2008)* – Ministry of Agriculture and Rural Development, Budapest, 2008

GEREFFI – HUMPHREY – STURGEON, *The governance of global value chains*, Review of International Political Economy, 1, 2005, 78-104.

GFK HUNGÁRIA (2008): Bor feltáró tanulmány (*Wine market research*), GfK Hungária Piackutató Intézet, 2008 – 49 p.

GILSON, R.J. – SABEL, C.F. – SCOTT, R.E., *Braiding: The Interaction of Formal and Informal Contracting in Theory, Practice and Doctrine*, Stanford Law and Economics Olin Working Paper No. 389 / Columbia Law and Economics Working Paper No. 367 (2010)

GILSON, R.J. – SABEL, C.F. – SCOTT, R.E., *Contracting for Innovation: Vertical Disintegration and Inter-firm Collaboration*, 109 (3) Columbia L. R. 431, (2009).

GOLDBERG, V.P., *'Risk Management in Long-Term Contracts'*, Columbia Law and Economics WP, available at SSRN: http://ssrn.com/ abstract=805184

GOMEZ, F., *Cooperation, Long-term Relationships and Open-endedness in contractual networks*, in *Inter-firm Cooperation and Economic Growth*, edited by F. Cafaggi, Cheltenham Glos, Edward Elgar, forthcoming (2010).

GOODHUE R. E., HEIEN H. L., SUMNER D. A., *Contracts and Quality in the California Winegrape Industry*, Review Of Industrial Organization **23:** 2003,267–282.

HANSMANN, H. – KRAAKMAN, R., *The essential role of organization law,* 110 Yale L. J. 387 (2000)

HEIEN, *Price Formation in the California Winegrape Economy*, Journal of Wine Economics, Vol. 1, No. 2, 2006, pp. 162-172

HELPER – MACDUFFIE – SABEL, *Pragmatic Collaborations: Advancing Knowledge While Controlling Opportunism*, Industrial and Corporate Change, 9, 2000, 443-483.

HNT (2006): Szőlészeti-borászati adatszolgáltatás *(Annual data report of the wine sector*), 2006, Hegyközségek Nemzeti Tanácsa (*National Council of Wine Communities)*, Budapest

HNT (2007): Szőlészeti-borászati adatszolgáltatás (*Annual data report of the wine sector*), 2007, Hegyközségek Nemzeti Tanácsa (*National Council of Wine Communities)*, Budapest

HNT (2008): Szőlészeti-borászati adatszolgáltatás (*Annual data report of the wine sector*), 2008, Hegyközségek Nemzeti Tanácsa (*National Council of Wine Communities)*, Budapest

HNT-FVM (2008): Inventory of wine-growing areas of Hungary - Data report to the European Commission, 2008 – FVM (*Ministry of Agriculture and Rural Development*), 2008, Budapest

IAMICELI, P. (ed.), *Le reti di imprese e i contratti di rete*, Giappichelli, Torino, 2009

JENNEJOHN, M.C., *Collaboration, Innovation, and Contract Design*, Columbia Law and Economics Working Paper No. 319, 2007, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1014420

KARLSSON - JOHANSSON - STOUGH, *Industrial Clusters and Inter-firm networks: An Introduction*, in KARLSSON - JOHANSSON - STOUGH, *Industrial Clusters and Inter-firm networks*, Edward Elgar, 2005, pp. 1-17.

KISARI I., SIDLOVITS D. (2004): A magyar élelmiszer kereskedelem bor- és pezsgőválasztéka (Choice of wine and sparkling wine in the Hungarian retail stores*)*, Borászati Füzetek, 2005/1, *Magyar Mezőgazdaság* – p. 19-23.

KISS, B. (2007): Egyre fontosabbak a modern láncok, AC Nielsen tanulmány (Modern chains are more and more important, AC Nielsen study) *Bor és Piac*, (*Wine and Market*) 2007/1, 38-39. p.

KSH (2008): Wine market balance, 2008, Központi Statisztikai Hivatal *(Hungarian Central Statistical Office)*, 2008, Budapest

LAKNER, Z., HAJDU, I. (2002): *The Competitiveness of Hungarian Food Industry – a System Based Approach*, Mezőgazda Kiadó, Budapest, 2002 – 165 p.

LAMOREAUX N. R. – RAFF D. M. G. – TEMIN P., *Beyond Markets and Hierarchies: Toward a New Synthesis of American Business History*, American Historical Review, 108, 2003, 404-433.

LANGLOIS R. N., *Modularity in Technology and Organization*, Journal of Economic Behavior and Organization, 49, 2002, 19-37.

LANGLOIS R. N., *The Vanishing Hand: the Changing Dynamics of Industrial Capitalism*, Industrial and Corporate Change, 12, 2003, 351-385.

LANGLOIS, R. N., *Comment on 'Technological Revolutions and the Evolution of Industrial Structures' (by Giovanni Dosi, Alfonso Gambardella, Marco Grazzi, and Luigi Orsenigo)*, 3 (2) Capitalism and Society Article 7, (2008).

LOPES A., MACARIO F., MASTROBERARDINO P. (2007), *Reti di imprese. Scenari economici e giuridici*, Torino, Giappichelli

MARIANI, A., POMARICI, E., *Strategie per il vino italiano. Una ricerca de l''Informatore Agrario'. Costruzione di un documento di riflessione strategica per il settore vitivinicolo italiano*, ESI, Napoli, 2010.

MÉNARD, C., *The Economics of Hybrid Organizations*, 3 J. of Instit. and Theor. Ec. 345 ff., (2004).

MENARD C., *Hybrid Organisation of Production and Distribution*, Revista de Análisis Económico, Vol. 21, Nº 2, 2006, pp. 25-41.

MICELLI, S. – DI MARIA, *District Leaders as Open Networks: Emerging Business Strategies in Italian industrial Districts*, Marco Fanno working paper n. 38, 2007.

MÖLLER K., RAJALA A., *Rise of strategic nets — New modes of value creation*, Industrial Marketing Management, 36, 2007, pp. 895–908.

MONTAIGNE, E., SZABÓ, G. G., SIDLOVITS, D. (2005): Examination of contracting relationships in the Hungarian wine industry, 2. International conference on economics and management of networks 15/09/2005 - 17/09/2005, Budapest (HUN) - Corvinus, University of Budapest, Budapest (HUN) – 28 p

POMARICI E., *Recent evolution in the world wine market: supply, demand and new actors,* Schriftenreihe, n. 107, 2005, pp. 47-61.

POWELL W. W., *Interorganizational collaboration in the Biotechnology Industry*, Journal of Institutional and Theoretical Economics, 152/1, 1996, 197-225.

POWELL W. W., *Neither Market Nor Hierarchy: Network Forms of Organizations*, in CUMMINGS L. L. – STAW B. M. (eds), *Research in Organizational Behavior*, 12, 1990, 295-336.

RABOBANK, *Wine is business, shifting demand and distribution: major drivers reshaping the wine industry*-Rabobank International- Food & Agribusiness Research, Utrecht, 2003.

RADÓCZNÉ KOCSIS, T. (2002): Az Európai Unió új közös borpiaci rendtartásának termelési potenciált befolyásoló elemei és azok várható hatása a hazai termelőalapok változására (Measures of vineyard potential of the wine CMO and its prospective effects on the Hungarian production potential*), Agrárgazdasági Könyvek*, No. 5 2002, Agráregazdasági Kutató és Informatikai Intézet, Budapest, 2002

RAMA D., *Ruolo ed evoluzione dei nuovi sistemi di marketing (hybrids) nei nuovi scenari competitivi del sistema agro-alimentare*, in: Boccaletti S. (ed.), *Cambiamenti nel sistema alimentare*, Franco Angeli, Milano, 2010.

RITTER, T., WILKINSON, I. F., & JOHNSTON, W. J., *Managing in complex business networks*, Industrial Marketing Management, 33(3), 2004, pp. 175−183.

RICHARDSON G. B., *The Organization of Industry Revisited,* DRUID Working Papers, 2003.

RICHARDSON G. B., *The Organization of Industry,* The Economic Journal, 82, 1972, 883-896.

RUIZ PERIS, J.I., *Hacia un Derecho para las redes empresariales*, Tirant lo Blanch, 2009.

RUIZ PERIS, J.I., *Business networks as a legal explanatory framework*, in *Festschrift fuer Klaus J. Hopt*, zum 70.Geburstag am 24. Aug. 2010, De Gruyter, Berlin, 2010, band 2, pp. 2901-2917.

SABEL C. F. – ZEITLIN J., *Neither Modularity nor Relational Contracting: Inter-Firm Collaboration in the Net Economy*, Enterprise and Society, 3, 2004, 388-403.

SABEL, *A real-time revolution in routines*, in ADLER – HECKSCHER, *The firm as a collaborative community*, OUP, Oxford, 2006, p. 106 ff.

SCHWARTZ, A. - SCOTT, R.E., *'Contract theory and the limits of contract law'*, Yale Law Journal 2003, 541

SIDLOVITS, D., KATOR, Z. (2007): Characteristics of Vertical Coordination in the Hungarian Wine Sector, 104th EAAE Seminar on Agricultural Economics and Transition 'What was expected, what we observed, the lessons learned', September 6-8, 2007, CORVINUS University of Budapest, Budapest, Hungary – 28 p

SPEKMAN, R. E., ISABELLA, L. A., & MACAVOY, T. C., *Alliance competence: Maximizing the value of your partnerships*, Wiley, New York, 1999.

TEECE, D., G. P. PISANO, *The Dynamic Capabilities of Firms: An Introduction*, Journal of Economic Behavior and Organization, 27 (3), 2004, pp. 537-556.

TEUBNER, G., *Networks as Connected Contracts*, (2008), available at www.ssrn.com p. 32 ff.

TOTTH, G., HOFMEISTER-TÓTH, Á. (2005): Miért beteg a magyar bormarketing?, *Marketing oktatás és kutatás a változó Európai Unióban, (*Széchenyi István Egyetem, Győr, 2005 augusztus – Tanulmánykötet) *Why the Hungarian wine marketing is sick?* Study volume published by Szechenyi University (in Hungarian)

WILLIAMSON O. E., '*The economics of governance*', American Economic Review 2005, pp. 1-18

WILLIAMSON O. E., *Markets and hierarchies: Analysis and antitrust implications*, New York: Free Press, 1975

WILLIAMSON O. E., *The Mechanisms of Governance*, Oxford University Press, 1996

WILLIAMSON O. E., *Transaction Cost Economics: The Governance of Contractual Relations*, Journal of Law and Economics, October 1979, 22, 233 261.

WILLIAMSON, O. E., Comparative Economic Organization: The Analysis of Discrete Structural Alternatives". *Administrative Science Quarterly*, 36 (2), 1991, pp. 269-296.

WILLIAMSON , O. E. (1985). *The Economic Institutions of Capitalism,* The Free Press-Macmillan, New York.

ZINGALES, L., *In Search Of New Foundations*, CRSP Working Paper No. 515, University of Chicago Booth School of Business, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=228472

European University Institute
European University Press