# Catching up Trajectories in the Wine Sector: A Comparative Study of Chile, Italy and South Africa





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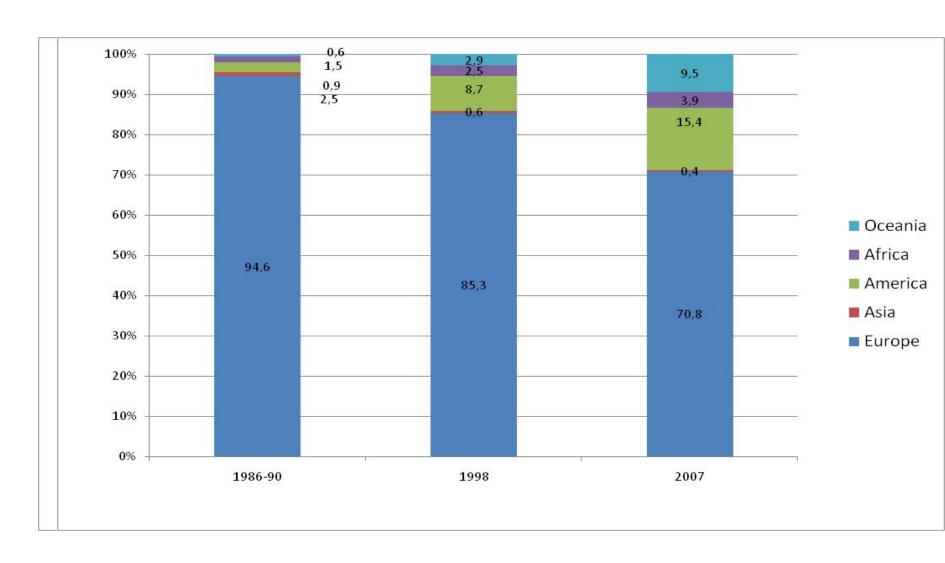
# Some stylised facts

Wine is an increasingly internationally traded good: rapid growth of export volumes and values explained by

consumption falling in the traditional producing countries, especially France and Italy;

- consumption expanding in non-producing countries in Europe (UK, Netherlands, Sweden,...) and Asia (Japan, and very recently Korea, China, India);
- Emergence of New World producers: volume expansion and quality upgrading;
- ➤ Old World producers facing serious challenges in an incresingly competitive market.

## Wine World Export



#### The traditional theory of catching up

- Emergence of New World wine producers can be hardly explained by conventional theories of catching up:
  - Adoption and adaptation of technologies from advanced economies;
  - Relative speed along a fixed track;
  - Niche strategies and market segmentation by followers;
- Windows of opportunities have been opened up by relevant discontinuities on the demand and supply side;
- Process of technological and organizational modernisation driven by newcomers.

#### The Sectoral Systems of Innovation

- Our analysis is based on the four constituent dimensions of a sectoral system (Malerba, 2004; Malerba & Nelson, 2007; Malerba & Mani, 2009):
  - Market;
  - Knowledge and technology;
  - Key actors and networks;
  - Institutions.

### **Market**

Relevant discontinuities in wine consumption habits since the late 1970s

- a) Traditional wine countries
  - Decline or stagnating consumption;
  - Wine drinking as a "cultural experience";
- **b)** Emergent markets (Northern Europe, US, Australia, lately Russia and China) inexperienced consumers
  - Increasing popularity of wine as a "beverage;"
  - Preference for easy drinking and pleasant tasting varietal wines (Sauvianon Cabornet etc.):

Quality is no longer the exclusive domain of producers, it is increasingly the value perceived by the market

#### NW vs. OW response to market opportunity

#### **New World:**

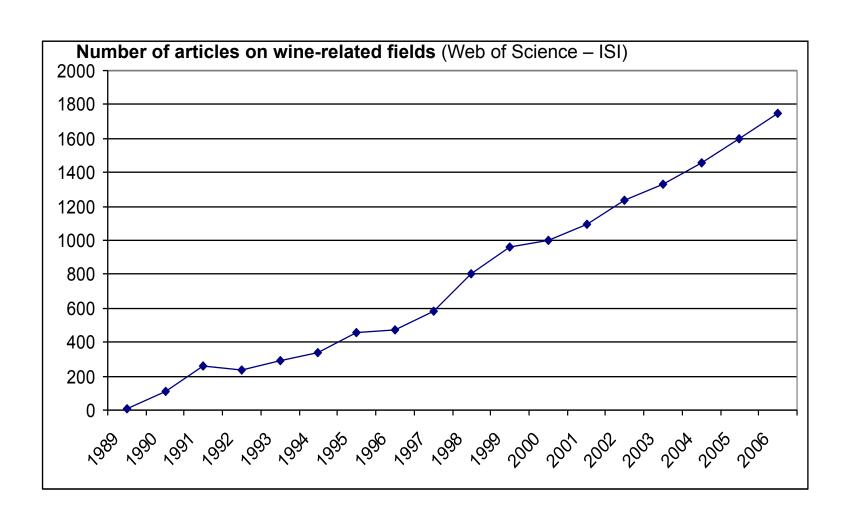
Demand changes embraced & favoured by California and Australia, followed by Chile, South Africa, Argentina,.., through:

- Knowledge and technology:
  - > Investments in science;
  - Access to foreign knowledge;
  - Market-driven research to build up products satisfying new international tastes;
- Market: Aggressive marketing strategies, branding, large scale retailing;
- Institutions: Setting up of an efficient institutional framework.

**Old World:** Initially, inertial response (strengthening the concept of *terroir* and maintaining a producer-driven approach).

### **Knowledge**

Intense process of knowledge codification and formal investigation



### **Technology**

#### **NW:** Market driven approach

- Research oriented towards responding to (and further strengthening) the changes in demand
  - > Introduction of new grapes varieties;
  - > Reduction of the variability of output in order to obtain wines with regular taste and quality.
- -Large investments in human resources, marketing and branding;
- -Access to external sources of knowledge (external consultants).

#### **OW:** Producer driven approach

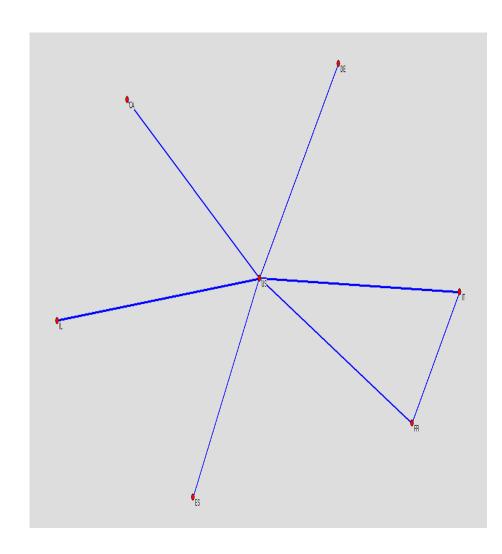
- Strenghtening of traditional varieties;
- Process-related investments;
- In-house competences and local research networks
  - > context-specific and cumulative learning.

#### The importance of external knowledge

- Almost all the Chilean firms interviewed rely on external consultants as agronomists or oenologists (the flying winemakers);
- Piedmont producers rely exclusively on experts from the same region and on internal competences;
- Experimental activity: 85% of the Chilean and 67% of the South African firms do undertake this activity in collaboration with some external partners, while in Piedmont this happens only in 48% of the firms.

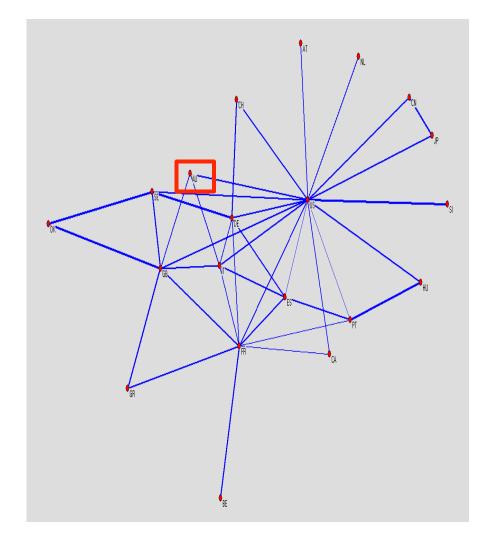
# Network of research collaborations between countries: 1992 – 1996

- Only European (France, Germany, Italy and Spain) and North-American countries, with the exception of Israel, are involved in international collaborations;
- The network is fully centred around the USA, with which all the other countries are connected



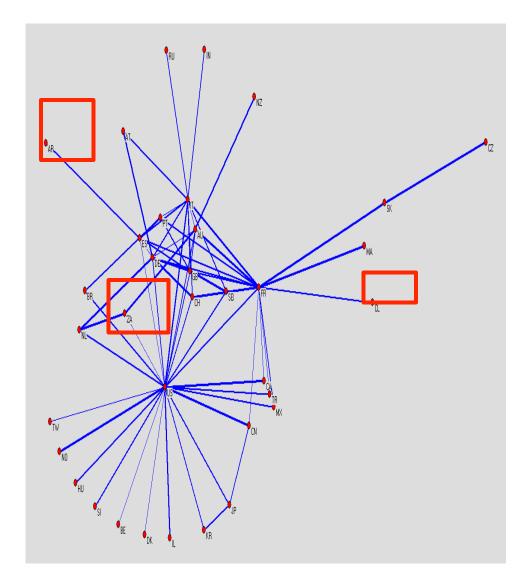
# Network of research collaborations between countries: 1997 – 2001

- The number of countries involved increases significantly from 7 in the previous period to 20;
- The USA is still the central player, being the country with most linkages;
- Among the new players, there are Australia, some Asian countries and some other European countries,



# Network of research collaborations between countries: 2002 - 2006

- The network increases its complexity with the participation of 36 countries;
- Among the new countries entering into the international research community by the time considered there are Argentina, Chile and South Africa.



### U-I networks in Chile and SA

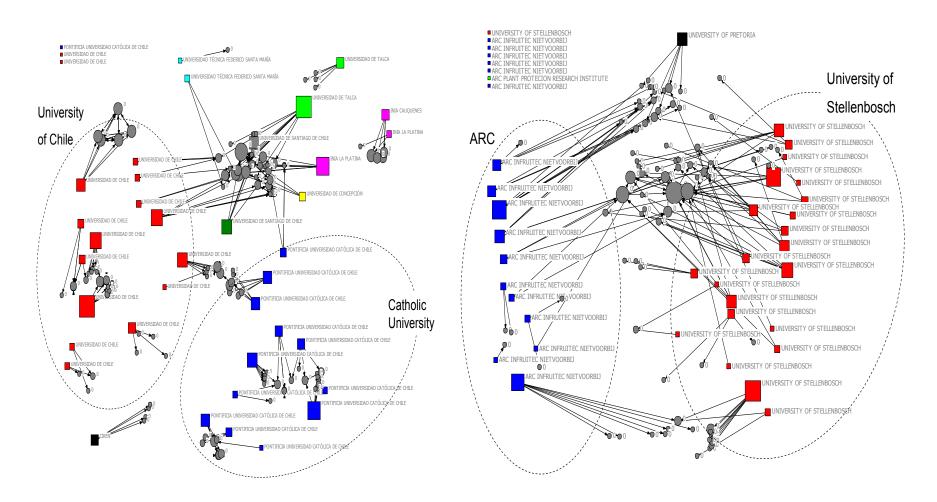


Figure 6 University-Industry network in Chile

Figure 7 University-Industry network in South Africa

### **Main Actors**

- Remarkable process of consolidation across the NW, vertical integration, foreign capital participation;
- Italy is dominated by very small wineries;
- The sum of the total sales of the top 5 Italian wine producers is only €1 bln, much less than world leaders as Constellation Brands which almost reached €4 bln.

| Rank | Company        | Headquarter | Volume of sales  | World share (%) |
|------|----------------|-------------|------------------|-----------------|
|      |                |             | (mln 9-lt cases) |                 |
| 1    | Constellations | USA         | 104.0            | 3.9             |
|      | Brands         |             |                  |                 |
| 2    | E&J Gallo      | USA         | 72.0             | 2.7             |
|      | Winery         |             |                  |                 |
| 3    | The Wine Group | USA         | 41.9             | 1.6             |
| 4    | Foster's Wine  | AUSTRALIA   | 39.7             | 1.5             |
|      | Estate         |             |                  |                 |
| 5    | Pernod Ricard  | FRANCE      | 37.5             | 1.4             |
| 6    | Castel Freres  | FRANCE      | 36.0             | 1.4             |
| 7    | Bacardi        | BERMUDA     | 25.7             | 1.0             |
| 8    | Le Grand Chais | France      | 22.0             | 0.8             |
|      | de France      |             |                  |                 |
| 9    | Vina Concha y  | CHILE       | 21.4             | 0.8             |
|      | Toro           |             |                  |                 |
| 10   | Distell Group  | SOUTH       | 20.5             | 0.8             |
|      |                | AFRICA      |                  |                 |

### <u>Institutions</u>

- Following the early successful Australian experience, a top-down planning approach has been followed by South Africa and more recently by Chile;
- Industry-level umbrella institutions (one single organisation with different branches) are created with the aim of co-ordinating export oriented priorities and targets, promoting and socialising a vision for the industry at large;
- Italy: fragmentation and redundancy.

# Concluding remarks and some recent trends

- The wine industry represents an extremely interesting case in point of technological renovation driven by emerging countries that, following different trajectories, have been moving the competitive game on new playgrounds;
- Incumbents' response: inertia and then awareness of the new playground;
- Recently, the Old World has begun to respond through strategies of diversification and experimentation for upgrading. These strategies address the demand side evolutions, mainly the diffusion of a gourmet culture, in which wine drinking is perceived as contributing to a richer cultural experience, and variety and specificity are positive attributes;
- In this perspective, highly centralized R&D policies, such as those implemented by New World countries, may become increasingly inappropriate to tackle the emerging pattern of diversified demand?

# Forthcoming in 2010

Innovation and Technological Catch-Up:
The Changing Geography
of Wine Production
Elisa Giuliani, Andrea Morrison &
Roberta Rabellotti (Eds.)
Edward Elgar

# **THANK YOU**