Wine Market Regulations in a Small World

August 9, 2007, Wine Conference, Davis

Henrich Brunke*, Rolf A.E. Mueller*, Daniel A. Sumner**

*University of Kiel, Germany; **UC Davis and UC Ag Issues Center
Main points

1. Regulations on wine and grape production methods differ between Old World and New World wine regions and lead to clashes.

2. More trade and more closely linked markets imply that old regulations may no longer be suitable.

3. Old world regulations are slow to adapt and may impede the competitiveness of Old World wine producers.

4. Restrictions on production methods used by imports may cause trade clashes.
Quotes

• "... the Australian wine industry has established a competitive position based on a 'culture of innovation' rather than 'tradition'."
  (Aus Govt 1995, p.112)

• "One of the strengths of the Australian wine grape and wine industry is the development and use of new processes and technology."
  (Aus Govt., 1995, p. 111)

• Why is Australia’s wine industry so successful?
  “Because we do not have your regulations!”
  Simon Thistlewood, Winemaker, Bimbadgen
What have these two men got to do with each other?

Malcolm McLean 1913 - 2001

Robert Mondavi 1913 -

SS Ideal X

58 35-ft Container; 1956

Robert Mondavi WINE
Globalization of Wine Market

• Trade agreements leading to reduction in trade barriers
• Bilateral wine-specific agreements
• Falling transportation costs
  ~ 0.10 €/bottle from Melbourne to Hamburg
• Increased access to information on wine through new technologies
• Exchange rates
Development of World Wine Markets, 1976-today

• World wide production decreased 16 percent and consumption by about 17 percent
• New World has increased production, while Old World production has fallen sharply
• New World consumption has increased in most countries, while Old World consumption has fallen
• World trade has nearly doubled, and New World shares in exports have increased
Exports as share of world exports (excl. intra-EU trade), 1995-2005

Source: Wittwer and Rothfield
From Globalization to Regulation

• More competition, mainly in US, UK, emerging Asian and lesser extent German import markets

• In France, for example, with consumption decreasing, exports becoming more important

• Regulations maybe affecting the competitiveness

What are these regulations?
### Overview of wine grape growing regulations in four countries

<table>
<thead>
<tr>
<th>Regulation</th>
<th>France</th>
<th>Germany</th>
<th>Australia</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limits on area planted</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Max. number of plants/ha</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Max. wine marketing</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Limitations on varieties planted</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Limits on irrigation</td>
<td>Yes(^{(1)})</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

\(^{(1)}\): as of 2007, irrigation in France became legal during three months in the summer.
## Winemaking regulations in 4 countries

<table>
<thead>
<tr>
<th>Additives and Techniques Restricted</th>
<th>France</th>
<th>Germany</th>
<th>Australia</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>adding yeast, malolactic bacteria</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>adding concentrated grape must</td>
<td>Yes*</td>
<td>Yes*</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>adding sugar to increase alcohol; &quot;chaptalization&quot;</td>
<td>Yes/No*</td>
<td>Yes/No*</td>
<td>Yes</td>
<td>No*</td>
</tr>
<tr>
<td>acidification</td>
<td>Yes/No*</td>
<td>Yes/No*</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>deacidification</td>
<td>Yes/No*</td>
<td>Yes/No*</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>adding water</td>
<td>Yes*</td>
<td>Yes*</td>
<td>No*</td>
<td>No*</td>
</tr>
<tr>
<td>use of oak chips and staves</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

*: restricted except under specified conditions or in the EU depending on the geographic location. Sugar, f.e. is allowed in northern, but not in southern Europe. Adding sugar allowed in US not CA.
Barrels versus oak chips

- Cost of a 225 l barrique barrel: ~ $800 per barrel
- Loosing value quickly: after about 5 years no more use
- Production of oaked wine: $225 = 675 l
- Additional cost per liter of oaked wine: ~ 1.10 $/l
- Additional cost of oaked wine using chips: 2-3 $/l
- **Difference in taste:** not detected by most buyers
Winemaking regs in 4 countries, cont.

<table>
<thead>
<tr>
<th>Technological Processes restricted</th>
<th>France</th>
<th>Germany</th>
<th>Australia</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse osmosis</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Spinning cone column</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Policy Responses

• **2006 EU-US wine accord**
  – oenological methods (oak chips)
  – geographic indications (GIs)
  – low alcohol wines (< 7%; e.g. ice wine from Germany)

• **2007 negotiations for a new EU-AUS wine agreement**
  – mainly labeling and GIs

• **2007 Proposal for EU CMO Reform**
  – discontinue intervention measures, i.e. distillation subsidies
  – subsidies for grubbing up of vines until 2013 (?) (new plantings)
  – prohibition of chaptalization (adding sugar to increase alcohol) (~ the end for German red wine?)
  – labeling (variety without origin)
Economic Rationales for Wine Regulations

1. Provide consumers with consistent, uniform and traditional product
2. Restrict output to raise price
3. Differentiate the local wine from wine produced in other regions
4. Favor traditional producers over local innovators

Regulations may have important impacts on producers, consumers and competitors.
1. Provide consumers with consistent, uniform and traditional product

• Raise demand through stable quality, which allows region to claim appropriate price
• For example, variety or reverse osmosis restrictions may assure consumers a traditional product
• Demand shifts out and may be less elastic
• Consumers may benefit if the rules comport with their tastes
2. Restrict output to raise price

- With globalization demand within a regulated region may become more elastic and cartel rents decline
3. Differentiate the local wine from wine produced in other regions

- This aims at having a specific demand for a domestically produced product and
- to make the consumer value the local or regional product
- Increase cartel rents by causing demand to be more inelastic
- Similar to picture in (2) but now demand elasticity is created by a regulatory strategy
- Less effective when consumers do not recognize the regulation as creating a distinctive product
- Ex: “Oak is oak” and consumers may not value a barrel over chips
4. Favor traditional producers over local innovators
4. Favor traditional producers over local innovators
## Impacts of regs on different actors

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Restriction of Spinning Cone</strong></td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td><strong>Restriction on Yield</strong></td>
<td>+</td>
<td>-</td>
<td>+/-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>
On-going research

• Understanding better what drives specific regulations
• How has the increased competition affected the impacts of regulations and regulation change?
• Identify the costs of regulation on different groups of producers and consumers and hence the total welfare impacts

• For paper draft: dasumner@ucdavis.edu, brunke@primal.ucdavis.edu
“European wine producers and traders are often seen as the victims of cumbersome regulations, imposed by the EU and the member states, that make them anticompetitive”, while, in fact, “these rules are the result of multiple decisions taken after conversation with public actors and representatives of the industry “

Andy Smith, research director at the Political Science Institute in Bordeaux (FNSP-CERVL),
Regulations in four countries

- EU: Council Regulation, 1999
  - now under review
- France: Appellation d’origine contrôlée, 1935 through Institute National des Appellation d’Origine
- Germany: wine law of 1971
  - several minor updates since then
- Australia: wine law of 1981
- USA: wine law of 1979 through Alcohol and Tobacco Tax and Trade Bureau
Maybe use the following

• One bullet on German wine somewhere, as example of innovation
Wine Production and Consumption, 1975-2005

Surplus: 42 Mio. hl

Source: OIV
Two Country Model w/ and w/o transport cost