Wine as credence/experience good

• Experts’ opinions may exert a relevant effect on both demand and supply on the market for wine because:
  • They affect consumers’ tastes and willingness to pay
  • They affect producers’ pricing strategies
  • They act as reputation signals
  • They provide indirect advertising

• An “optimal” refereeing process should be based on some “objective” drivers/signals of quality.

But … “experts” are human beings

• Even though (blind) wine tasting is usually done by panels of experts who evaluate “objective” signals (acidity, olfaction intensity and persistence, structure of tannins, etc.) the refereeing process is likely to be affected by personal preferences, histories, tastes.

• It is then possible that expert’s evaluations are “biased” or are very heterogeneous in some directions, which do not depends on quality.

Research questions

• How do different experts evaluate the same wines?
• Do their evaluations really differ (i.e. subjective beliefs prevail)?
• Or are they selecting always the same wines as “the best” (i.e. objective signals prevail)?
Our project

- We evaluate the refereeing process in Italy and test whether there exist any bias, depending on:
  - Regional origin:
    - Historical wine-producing regions (e.g. Tuscany, Piedmont) versus regions with more recent oenological traditions (e.g. Friuli Venezia Giulia, Alto Adige, Sicily, Campania, Basilicata).
  - Producer experience: older versus younger producers.
  - Grape provenience: international versus autochthonous grapes.

The Italian evaluation system

- There are three main guides:
  - Associazione Italiana Sommelier (AIS) gives “grapes” to wines, from 0 to 5: best wines are 5 “grapes”.
  - Seminario Veronelli (VER) gives 0-100 scores to wines and “stars” are awarded for wines above 84: best wines are “Super 3 stars”, i.e. with score equal or higher than 91/100.
  - Gambero Rosso-Slow Food (SF) gives “glasses” to wines, from 0 to 3+: best wines are 3 “red glasses”.

Research methodology

- For each wine awarded by at least one guide with the highest scores, we collect data on the following characteristics:
  - Wine type: red, white, sweet wine.
  - Regional provenience.
  - Grape typology: indigenous (e.g. Sangiovese, Trebbiano) vs. international (e.g. Cabernet, Chardonnay).
  - Grape mixture: Varietal wine vs. blended.
  - Number of perceived aromas (as in the AIS guide).
  - Year of harvest (in 2008 producers may decide to sell wines of very different years).
  - Experience of the wine-producer (in years since the foundation).
  - Number of produced bottles.

- We use these data as regressors to estimate the probability that a wine in the sub-sample is awarded the highest score and is evaluated as “the best” wine by all the three guides simultaneously using a probit (probit?) model.
Descriptive statistics: Awards

- SF-GR:
  - Total refereed wines: 10489.
  - Awarded wines: 305 (2.91%).
    - Red wines: 82%, white wines: 17%, sweet wines: 1%.
- AIS:
  - Total refereed wines: 8735.
  - Awarded wines: 309 (3.54%).
    - Red wines: 81%, white wines: 17%, sweet wines: 2%.
- Veronelli:
  - Total refereed wines: 15463.
  - Awarded wines: 489 (3.16%).
    - Red wines: 94%, white wines: 3.5%, sweet wines: 2.5%.

Descriptive statistics: regional weights

- SF-GR:
  - Total refereed wines: 10489.
    - Piedmont: 19.98%, Tuscany: 14.52%, Friuli Venezia Giulia: 10.70%.
    - Total awarded wines: 305 (2.91%).
      - Piedmont: 20%, Tuscany: 21.31%, Friuli Venezia Giulia: 9.18%.
- AIS:
  - Total refereed wines: 8735.
    - Piedmont: 17.32%, Tuscany: 14.63%, Friuli Venezia Giulia: 11.27%.
    - Total awarded wines: 309 (3.54%).
      - Piedmont: 23.3%, Tuscany: 15.86%, Friuli Venezia Giulia: 9.06%.
- Veronelli:
  - Total refereed wines: 15463.
    - Piedmont: 24.28%, Tuscany: 17.65%, Friuli Venezia Giulia: 10.04%.
    - Total awarded wines: 489 (3.16%).
      - Piedmont: 22.7%, Tuscany: 37.83%, Friuli Venezia Giulia: 3.68%.


Estimation results

<table>
<thead>
<tr>
<th>Prob of Award</th>
<th>Coeff</th>
<th>Std Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indigenous grape</td>
<td>0.305</td>
<td>0.216</td>
</tr>
<tr>
<td>Varietal</td>
<td>0.045</td>
<td>0.103</td>
</tr>
<tr>
<td>Red</td>
<td>0.410**</td>
<td>0.086</td>
</tr>
<tr>
<td>White</td>
<td>0.025</td>
<td>0.288</td>
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<tr>
<td>Aromas (Number)</td>
<td>0.180</td>
<td>0.129</td>
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<tr>
<td>Category (DOCGDUM)</td>
<td>0.191</td>
<td>0.131</td>
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<tr>
<td>TuscanyDum</td>
<td>0.243***</td>
<td>0.054</td>
</tr>
<tr>
<td>PiedmontDum</td>
<td>-0.252</td>
<td>0.187</td>
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<tr>
<td>SicilyDum</td>
<td>-0.047</td>
<td>1.495</td>
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<tr>
<td>CampaniaDum</td>
<td>0.173</td>
<td>0.128</td>
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<tr>
<td>Produced bottles</td>
<td>-0.251</td>
<td>0.298</td>
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<tr>
<td>Experience (years)</td>
<td>-0.112**</td>
<td>0.015</td>
</tr>
<tr>
<td>Const</td>
<td>-0.963</td>
<td>0.101</td>
</tr>
</tbody>
</table>

McFadden R-squared: 0.487, number of obs: 1103
Concluding remarks

- Convergence among experts is not that strong: only 36 over an average of about 10000 refereed wines have been awarded the highest grade by all guides.
- Convergence seems to be driven by characteristics which are not necessarily a signal of quality: regional provenience and typology (red wines).
- Surprisingly, experts’ opinions are more homogenous when wines are produced by relatively less experienced producers.
- Next step: add the time dimension to the current cross-sectional dataset and examine variability and persistence of judgements.

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Concluding remarks

- Final step: try the “Superwines”!