Parker, Wine Spectator and Retail Prices of Bordeaux Wines in Switzerland: Results from Panel Data 1995-2000

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Overview

- Introduction and Motivation
- Data and Econometric Model
- Empirical Results
- Conclusion
Introduction and Motivation

• Wine as experience good and the relevance of expert ratings for long maturing wines as those of Bordeaux.
• Robert Parker is considered as the most important wine reviewer with influence on style and prices of wines.
• This paper: influence of Parker and Wine Spectator ratings on Swiss retail prices of the Bordeaux 1995-2000 vintages in a panel two-way fixed effect model.
Data and Econometric Model

• Data source: Vinfox 2010:
  - 127‘500 retail offerings of 35‘000 wines (25% Bordeaux) with prices and available grades of Parker and Wine Spectator.
  - For Bordeaux classified growths up to 20 offerings.

• “Appellation” specific two-way fixed effects model in order to account for unobserved quality characteristics.
Table 1: Description of the Bordeaux Wine data sets for the Years 1995 – 2000

<table>
<thead>
<tr>
<th></th>
<th>Saint Estéphe</th>
<th>Pauillac</th>
<th>Saint Julien</th>
<th>Margaux</th>
<th>Haut Medoc</th>
<th>Graves rouges</th>
<th>Saint Emilion</th>
<th>Pomerol</th>
</tr>
</thead>
<tbody>
<tr>
<td>classified</td>
<td>5</td>
<td>18</td>
<td>11</td>
<td>16</td>
<td>5</td>
<td>13</td>
<td>72</td>
<td>62</td>
</tr>
<tr>
<td>included</td>
<td>5</td>
<td>16</td>
<td>11</td>
<td>14</td>
<td>5</td>
<td>13</td>
<td>37</td>
<td>31</td>
</tr>
<tr>
<td>Vintage coverage</td>
<td>0.867</td>
<td>0.906</td>
<td>0.939</td>
<td>0.774</td>
<td>0.833</td>
<td>0.782</td>
<td>0.608</td>
<td>0.608</td>
</tr>
</tbody>
</table>
Figure 1: Ratings (Parker, WS) and prices (PMED, SFr) for St Estèphe cl. Growths, 1995-2000
Econometric Model

\[ \log(p_{it}) = \beta_1 \text{ratingpar}_{it} + \beta_2 \text{ratingws} + \alpha_i + \eta_t + \varepsilon_{it} \]

\( i = 1,2,\ldots,N, \ t = 1,2,\ldots,T = 6 \)

\( \alpha_i : \text{unobservable chateau specific fixed effect} \)

\( \eta_t : \text{unobservable time specific fixed effect} \)

\( \varepsilon_{it} : "\text{usual" regression error} \)
Empirical Results

- No statistically significant Wine Spectator effect.
- Parker effect insignificant or small for Saint Estéphe, Saint Julien, Margaux, Haut Medoc, Graves.
- Parker effects highly significant and large for Pauillac, Saint Emilion and Pomerol (3.4 – 7.4 % price increase per Parker point).
- These three appellations are overrepresented in the Parker 1995 „outstanding“ classification.
- One-way fixed effects specifications lead to spurious effects of Parker and Wine Spectator.
- Médoc “chateau” fixed price effects are better accounted for by the 1855 classification than that of Parker in 2008 (correlation 0.78 and 0.54 for logs, respectively).
Table 2: Marginal Effect of Parker and Wine Spectator Ratings on Swiss Retail Bordeaux Prices of the Years 1995 – 2000, Two-way fixed effects panel regression

<table>
<thead>
<tr>
<th></th>
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<th>Saint Emilion</th>
<th>Pomerol</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\beta_1$</td>
<td>0.0316 (1.629)</td>
<td>0.0582 (4.544)</td>
<td>0.0260 (2.263)</td>
<td>0.0063 (0.652)</td>
<td>0.0173 (1.071)</td>
<td>0.0168 (0.906)</td>
<td>0.0383 (2.856)</td>
<td>0.0736 (3.050)</td>
</tr>
<tr>
<td>$\beta_2$</td>
<td>0.0074 (0.372)</td>
<td>0.0070 (0.599)</td>
<td>0.0149 (1.183)</td>
<td>0.0136 (0.875)</td>
<td>-0.005 (-0.33)</td>
<td>-0.0045 (-0.33)</td>
<td>0.0126 (0.981)</td>
<td>0.0109 (1.320)</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.945</td>
<td>0.973</td>
<td>0.933</td>
<td>0.958</td>
<td>0.867</td>
<td>0.938</td>
<td>0.925</td>
<td>0.960</td>
</tr>
<tr>
<td>Durbin Watson</td>
<td>2.597</td>
<td>2.105</td>
<td>2.023</td>
<td>2.576</td>
<td>2.170</td>
<td>2.081</td>
<td>1.759</td>
<td>2.479</td>
</tr>
<tr>
<td>sample size</td>
<td>26</td>
<td>87</td>
<td>62</td>
<td>65</td>
<td>26</td>
<td>61</td>
<td>135</td>
<td>113</td>
</tr>
<tr>
<td>Fixed Effect F test</td>
<td>14.676 (.0000)</td>
<td>31.304 (0.000)</td>
<td>13.619 (0.000)</td>
<td>28.852 (0.000)</td>
<td>10.160 (0.001)</td>
<td>16.971 (0.000)</td>
<td>15.372 (0.000)</td>
<td>25.244 (0.000)</td>
</tr>
</tbody>
</table>
Figure 2: Médoc chateau fixed effects and the classifications of 1855 and Parker 2008
Conclusion

• No statistically significant Wine Spectator Rating effect on Swiss Bordeaux retail prices for vintages 1995 – 2000.
• Mixed evidence for Parker ratings: three out of eight appellations with strong and statistically significant effects (Pauillac, Saint-Emilion, Pomerol).
• Parker competence, snob effect or other unobserved quality characteristics besides two-way fixed effects?
• “Chateau” fixed price effects are better accounted for by the 1855 classification than that of Parker in 2008.