Price or Quality Competition?  
Old World, New World and Rising Stars in Wine Export  

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1. Introduction

Recent contributions in the theory of trade and firm heterogeneity show insightful results. Melitz (2003) with his workhorse model in this 'new new trade theory' argues that a firm's product competitiveness depends upon price: the cheapest goods are the most competitive. An extension of this heterogeneous firms trade (HFT) model turns it into the quality heterogeneous firms trade (QHFT) model, where competitiveness depends upon the quality-adjusted price: when consumers care about quality, the highest priced goods are the most competitive. In this latter case, firms with the lowest observed prices are the least competitive. Using trade data it is possible to discern between the HFT and QHFT models. Given that transportation costs rise with market distance, the HFT model predicts that cheaper products are sold in more distant markets, while the QHFT tells that more expensive goods travel more.

These clearly opposed empirically testable implications provide the foundation of a testing of these models by Baldwin and Harrigan (2007; BH henceforth) and Baldwin and Ito (2008; BI henceforth), who can thus distinguish between price or quality competition. In particular, BI classify export goods (at the HS 6-digit level of disaggregation) of major exporting countries by quality and price competition. They find a high proportion of quality-competition goods for the major EU countries and a lower proportion for Canada, Australia and China. On a similar vein, Fontagné et al. (2008) find that the developed countries’ products are not directly competing with the developing countries’ ones. Because of their products’ superior quality, EU countries, for instance, have less direct competition with developing countries’ products than Japan or the US.

Our paper uses the BI empirical approach, by estimating the price-distance relationship in the wine trade for major exporting countries using panel data. We can then define a list of three types of wine exporting countries: those for which wine exports face price competition, those facing quality competition, and those that cannot be confidently placed in either category.

2. The model and data

The empirical model we employ is similar to BI. We look at a given origin nation’s exports of a wine (HS4 and HS6) product to all the major destination countries over a time period as long
as possible (1995-2011 for the HS4, shorter for HS6 data). The regression equation is the following:

\[ P_{t,d} = \beta_0 + \beta_1 \log(DIST_d) + \beta_2 \log(GDP_{t,d}) + \beta_3 \log(GDPCAP_{t,d}) + \varepsilon \]

where \( P_{t,d} \) is the log of the FOB unit value index to destination country \( d \) at time \( t \); \( DIST_d \) is the bilateral distance from the country under consideration to the destination country \( d \); \( GDP_{t,d} \) is the destination-country GDP at time \( t \); \( GDPCAP_{t,d} \) is the corresponding GDP per capita; and \( \varepsilon \) is an iid error. The main idea is that a negative sign of the coefficient \( \beta_1 \) would indicate price competition, while a positive sign would imply quality competition.

Price data come from UN COMTRADE. For the general “Wine of fresh grapes" category data is available from 1995 to 2011, while for its subcategories only for a shorter period. Bilateral distances between countries are available from the CEPII database, while GDP and population data are from the World Bank.

### 3. Preliminary results

In the following Table 1 we report the results of the estimation for the major producing countries from the old and new world.

#### Table 1. Results for HS 22.04 (Wine from fresh grapes)

<table>
<thead>
<tr>
<th>Countries</th>
<th>( \beta_1 )</th>
<th>St. dev.</th>
<th>Countries</th>
<th>( \beta_1 )</th>
<th>St. dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Old World</strong></td>
<td></td>
<td></td>
<td><strong>New World</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>1,566***</td>
<td>0,145</td>
<td>Argentina</td>
<td>-0,071</td>
<td>0,092</td>
</tr>
<tr>
<td>Germany</td>
<td>-0,066</td>
<td>0,081</td>
<td>Australia</td>
<td>0,224***</td>
<td>0,072</td>
</tr>
<tr>
<td>Italy</td>
<td>0,472***</td>
<td>0,064</td>
<td>Chile</td>
<td>0,246***</td>
<td>0,052</td>
</tr>
<tr>
<td>Portugal</td>
<td>1,037***</td>
<td>0,117</td>
<td>New Zealand</td>
<td>-0,282</td>
<td>0,272</td>
</tr>
<tr>
<td>Spain</td>
<td>0,7213***</td>
<td>0,061</td>
<td>South-Africa</td>
<td>-0,227**</td>
<td>0,110</td>
</tr>
<tr>
<td>UK</td>
<td>-1,495</td>
<td>2,139</td>
<td>USA</td>
<td>-0,393***</td>
<td>0,124</td>
</tr>
</tbody>
</table>

The major European countries, i.e., France, Italy, Spain and Portugal have significant positive coefficient. In other words, they seem to be engaged in quality competition. Germany and UK do not have significant coefficients for the distance, and hence can be considered neither facing quality nor price competition. These are probably expected results for practitioners of
the European wine industry, where the major producing countries have benefitted from a long tradition of production and consumption of large volumes of wines and from a good perceived quality reputation for exporting wine as well. We could discuss the relative magnitude of the coefficients among European countries – we believe again consistent with prior expectations – but we postpone it due to space limitations.

Even more interesting are the results regarding the “new world” countries. Australia and Chile have positive coefficients, i.e., they are engaged in quality competition. On the other hand, South-Africa and the USA have negative coefficients, i.e., they face price competition. And last, Argentina and New Zealand are engaged neither in quality nor in price competition.

We believe that overall these results fit in with our priors that nations with a traditional comparative advantage in wine production and trade should have a higher incidence of quality-type wines in their export mix. On the other hand, new world exporting countries might enter these markets initially with very competitive wines and eventually with a good reputation for quality as well, as seems witnessed by the new world rising stars, that is Australia and Chile. These findings might have interesting policy implications. Old world countries can maintain their competitiveness by further climbing up the quality ladders, bearing in mind that new world competitors might soon enter their turf.

Selected references