IMPROVING THE QUALITY OF FRENCH WINE: New evidence of the big impact of the strict production standards introduced by the appellation system

The appellation system introduced to the French wine industry in the mid-1930s led to a big improvement in the quality of wines, according to research by **Emmanuel Paroissien** and colleagues, to be presented at the annual congress of the European Economic Association in Manchester in August 2019.

Their study pairs newly assembled historical data on wine prices in each of 76 French *départements* over the period 1907-1969 with detailed cartographic information on the eligibility of vineyards for AOC recognition, in order to gauge the magnitude of the market inefficiency that prevailed prior to the 1935 reform.

The researchers find that AOC recognition increased the average wine price by 45%. Given that not all vineyards eligible for the AOC label claimed it, they calculate that the price effect on AOC wines was a staggering two-fold increase. Multiplying the average price increase by the share of vineyards eventually recognised (30.5% by 1969), the reform increased consumer welfare by 14%.

More…

France, 1920. You own a vineyard in the region of Barsac, which produces some of the best *Sauternes* (a sweet white wine). But the old vineyard needs replanting. American hybrids promise better disease resistance and higher yields, yet provide few of the taste characteristics of authentic *Sauternes*. After all, grape varietal is not regulated and the prestigious *Barsac* appellation will still appear on wine bottles, so you go for the hybrids in the hope of reaping benefits from consumers' gullibility.

Over the years, other unscrupulous producers do the same, in Barsac and other reputable regions. Consumers start noticing that the quality of wine appellations has gone down, which puts downward pressure on wine prices and further erodes producers' willingness to maintain quality.

Economists call this a market for lemons, after a seminal paper by George Akerlof published in 1970 that literally changed the way we think about markets. (In his paper, Akerlof was referring to bad used cars – 'lemons' – rather than wine, but the idea is close.)

France's response to the wine appellation scandal was to enact pioneering legislation in 1935 that forced producers claiming a reputable appellation (now referred to as an AOC, *appellation d'origine contrôlée*) to abide by strict production standards.

Today, this system seems almost trivial given the large number of geographical appellations found on the European market – not only for wines and not only for French products. At the time, it was highly controversial, and it still is for some trading partners who refuse to protect appellations in their jurisdictions, arguing that the intellectual protection serves little purpose, hinders commerce or amounts to creating monopolies.

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In essence, the researchers compare the evolution of prices over time across French *départements*, and correlate these trends to the extent of AOC recognition in each *département*. If the market was undersupplying quality prior to the reform due to free-riding, and if the reform was successful at improving quality in places where it was inefficiently low, then it should be that prices rose after the reform in *départements* with AOC recognition, relative to *départements* with little or no AOC recognition.

In short, this is exactly what the study finds. Figure 1 provides a graphical depiction of the effect, showing a divergence of prices from 1941 onwards across AOC and non-AOC departments.

Quantitatively, after controlling for various confounding factors, AOC recognition increased the average wine price by 45%. Given that not all vineyards eligible for the AOC label claimed it, the researchers calculate that the price effect on AOC wines was a staggering two-fold increase.

Of course, prices in AOC *départements* may have increased following the reform for reasons other than quality improvements. The main concern is that wine quantity could have decreased in those *départements* due to reduced yields (many AOCs specified maximum yields) or reduced vineyard acreage. Using historical yield and acreage data, the researchers are able to completely rule out this explanation.

They use their main price effect estimate to provide a rough measure of the welfare benefits of the reform. Multiplying the average price increase by the share of vineyards eventually recognised (30.5% by 1969), they find that the reform increased consumer welfare by 14%. They conclude that the pre-reform French appellation wine market was, indeed, a market for lemons.

ENDS

'How big is the 'lemons' problem? Historical evidence from French appellation wines' by Pierre Pierre Mérel (Agricultural and Resource Economics, University of California, Davis), Ariel Ortiz- Bobea (Charles H Dyson School of Applied Economics and Management, Cornell University, Ithaca, NY), and Emmanuel Paroissien (INRA, Rennes, France)

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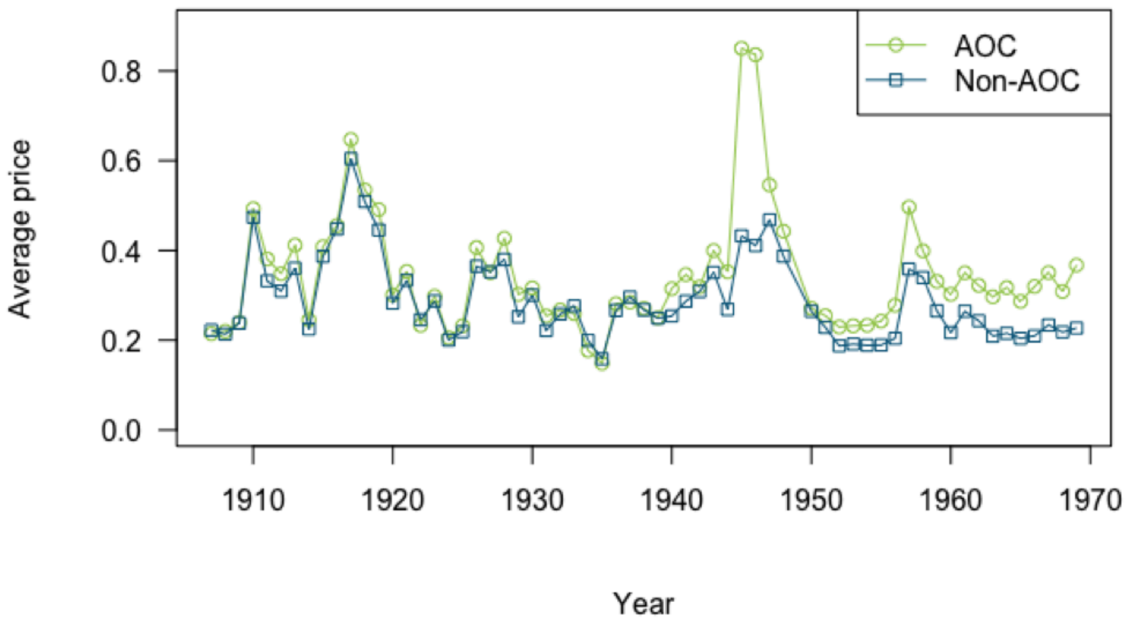
Figure 1: Average real wine prices in AOC and non-AOC departments



Note: Average real wine prices are calculated using production weights and conditioning on departments without missing data. Prices are deflated by a CPI. Production weights are constant over time and calculated as the average departmental wine production over the period. AOC departments (22) are departments with a 1969 share of vineyards eligible for AOC larger than 25%. Non-AOC departments (32) are departments with a 1969 share of vineyards eligible for AOC smaller than 2.5%. There are 9 departments with an intermediate share that are not represented.