Forensic Economics II: The *Full Return of the Empty Bottle*?

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Abstract: 
This paper follows-up on an earlier paper entitled “Some Evidence for New Wine to be sold in Old Bottles” in which I tried to explain that empty premium wine bottles may be bought in online auctions in order to be refilled and resold as fakes. In the previous model, I have argued that the most powerful variable explaining both the incidence of a sale and the online auction selling price of an empty premium wine bottle is the potential price that a full and presumably authentic bottle could fetch in the marketplace. In this paper, I present a new model trying to explain when full premium wine bottles that are offered for sale in online auctions might actually be faked. For this purpose, I analyze a data set of 756 Premier Cru Bordeaux wine bottles sold in online auctions. Dependent variable measuring the degree of uncertainty that the bottle offered is actually not authentic is the difference between the final online auction price and the price that a presumably authentic bottle is sold for through a trusted retailer in the market (the real-fake differential). My working hypotheses are that the real-fake differential characterizing the degree of uncertainty is related to the potential value of an authentic bottle as well as specific online auction characteristics in such a way that points to fraud.

Potential buyers are bidding on credence goods and are aware of fraud in online markets. Thus, they will not bid up the price to an amount a presumably authentic bottle is sold for by a trusted retailer. Based on the results of the earlier paper, the degree of uncertainty that buyers actually get an authentic bottle is related to the potential price that a full and presumably authentic bottle could fetch which in turn depends on wine quality characteristics such as Parker points and/or vintage and age characteristics. Thus, I argue in this paper that the price difference between the final online auction price and the price of a presumably authentic bottle is also related to wine quality characteristics such as Parker ratings and older vintages are expected to increase the real-fake differential as would a good vintage indicator (e.g. 1982). Specific online auction characteristics that determine the real-fake differential are whether or not a real picture of the bottle is displayed in the auction setting and whether the auction format is private or public. A real picture would increase the trust in the seller thus the coefficient is expected to be negative while a private auction format is less transparent and thus we expect that its coefficient is positive. Preliminary estimations indicate the following results. The real-fake differential increases by more than 100% for a 100 Parker point bottle relative to a bottle with less than 83 points. Another year of age on the bottle would increase the real-fake differential by about 2%. A 1982 vintage bottle carries a 33% premium relative to a 2000 vintage bottle. A real picture lowers the real-fake differential by about 4%.

**Key words:** auctions, fraud, forensic economics.