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Wine: To drink or invest in? A study of wine as an investment asset in French portfolios

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ABSTRACT

This paper aims to assess the role of wine investments in the diversification of French portfolios. Our 2007–2014 dataset is composed of not only Liv-ex indexes but also WineDex ones. These latter are proposed by iDealwine, an online platform for wine investment in France. We also include stocks, bonds and a risk-free asset to constitute different French portfolios based on the risk-aversion degree of investors (Canner et al., 1997). Moreover, we compare wine to another important alternative asset for French investors: gold. Following the mean-variance portfolio optimization approach (Markowitz, 1952), we find that portfolios with wine are more efficient than portfolios without it. However, following the mean-modified value-at-risk portfolio optimization (Favre and Galeano, 2002), the results with Liv-ex indexes are not maintained anymore. On the other hand, we use the Sharpe (1964) and modified Sharpe (Gregoriou and Gueyie, 2003) ratios to calculate the portfolio performance. We find that in most cases, the higher the proportion of wine, the higher the portfolio performance is. In all cases, our results suggest that iDealwine indexes, particularly WineDex Bordeaux, are more profitable than Liv-ex ones. On the other hand, following the optimal weights calculated by the Kroner and Ng (1998) method, we find that the less risk-averse the investors, the more they should include wine in their portfolios. Otherwise, we find that gold does

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not allow improving efficient frontiers. However, it allows improving the performance of French portfolios. A robustness check on the 2001–2006 period shows that wine and gold remain profitable for portfolio diversification even before the recent crisis period but with lower impacts on the performance improvement.

1. Introduction

It might seem that investing in grade wine is a recent practice but in fact the first investments date back over 150 years in the 19th century. This is thanks to advances in conservation methods and the advent of glass bottles and cork stoppers, allowing the wine trade to expand its horizons. In 1855, at the Paris Universal Exhibition, the Bordeaux wines were classified for the first time ever (from first to fifth growths) based on the chateau's reputation and the trading price (see Aytaç et al., 2014 for more information). Thus, collectors gradually began to consider wine as an investment, speculative and safe-haven asset or even a hedge against inflation and interest rate variations (see Ore, 1973). Today and throughout the world, wine is not only a consumer good but also an investment opportunity.

There are different ways to invest in wine. First, we can create our own wine cellar by buying wine in bottles directly from wineries or "*en primeur*," which means buying wine immediately after the harvest when it is still in barrels. Second, we can buy bottles through wine auctions.[1] Third, we can invest in wine investment companies[2] with a "turnkey" cellar managed by a professional or a self-managed one. Fourth, wine investment funds, like traditional mutual funds, are another way to invest in wine. In this case, each fund is a kind of portfolio containing several types of wine.[3] Fifth, investors can buy shares from a wine real estate investment group.[4] In this case, the investor buys vineyard parcels, which are then managed by a professional wine grower. The investor thus becomes the owner of a part of the vineyard proportional to the share held in the wine real estate investment group.

Traditionally, buying fine wine has been linked to emotional factors rather than to purely speculative factors. However, wine shows a low correlation with standard financial assets (see Fogarty, 2010 or Masset and Henderson, 2010). Thus, it can be complementary or substitutable in a traditional portfolio. Moreover, unlike traditional financial assets, wine can be consumed. Nevertheless, wine does not provide any revenue such as dividends for stocks and coupons for bonds. Moreover, it is less liquid than these latter: about 15 days are needed to sell wine, whereas an order for traditional financial assets can be executed almost instantly.[5] Furthermore, wine is an "agricultural" good. Thus, its quality and price depend on the winegrower's know-how, climate variations, institutional framework, production technology and also economic conditions (see Kourtis et al., 2012). Moreover, compared with investment in traditional financial assets, wine implies non-negligible storage, insurance and transaction costs. According to Masset and Henderson (2010), the total cost on wine investment is higher than on traditional financial assets which have no storage costs and low transaction costs. However, wine investments have more tax advantages[6] than traditional financial assets.

[1] Many auction houses such as Drouot, Christie's, Sotheby's, Morell Wine Auctions, and Acker Merall & Condit organize regularly fine wine sales. For several years now, auctions have also been online. For example, the prestigious *Hospice de Beaune* wine auctions, organized since 2005 by Christie's, allow participants to bid online since 2007.

[2] In France, there are some wine investment companies such as *patriwine.fr, cavissima.com, cavedepargne.com, labergereinvestment.com, idealwine.com, emlindex.com and rscorp.fr.*

[3] To our knowledge, Ascot Wine Management Fine Wine Fund, launched in the Bahamas in 1999, is the first such fund. Thereafter, many other wine funds emerge, such as Int'l Wine Investment Fund (Australia), Orange Wine Fund (the Netherlands), the Wine Investment Fund (Great Britain), and Uzès Grands Crus (France).

[4] For example, *UFG Group, Saint Vincent Group* or *La Française AM Group* in France.

[5] Interview with Franck Noguers, the founder of Patriwine, in *Les Echos Bourse*, December 20, 2013.

[6] For example, in Australia and England, wine investments are exempted from tax. In France, gains from wine investments are taxed at a flat-rate of 34.5%. Nevertheless, this rate is applicable only when the sale value is higher than 5000 euros per