Fine wine in risk minimizing portfolios

Abstract

We study the dynamics of relationship between the global, European, Chinese stock markets, fine wine and gold markets by using multivariate BEKK and DCC-GARCH frameworks and daily closing prices of LIVX50 index (representing fine wine market), S&P500, Shanghai Stock Exchange Composite (SHC) and FTSE100 indices (reflecting changes in the global, Chinese and European markets respectively) from 2010 to 2021. We found evidence of property of fine wine to be hedge to global market, Chinese market and currency. Moreover, fine wine can act as safe haven asset against S&P500 index and SHC index declines. Furthermore, there is some impact and a positive correlation between European market and fine wines market in few periods. Most important results provide empirical evidence that fine wine can be hedge to S&P500 index and GBP/USD exchange rate. Fine wine can act as safe haven asset against turmoil on global and Chinese market and declines in British currency, what can help investors minimize risks to build optimal portfolios. The slowdown of economic growth in Chinese economy cannot be risk to the fine wine market, which is opposite to what Cardebat and Jiao (2018) suggested.

The second part of the study compared the effectiveness of risk minimizing portfolios containing traditional financial instruments and two different alternative assets, namely fine wine and gold. Wine should have a larger share in two-component optimal risk minimizing portfolios than traditional financial instruments such as, for example, stocks.

Our analysis extends existing knowledge on the role of wine investments in Asian markets, especially China. In particular, employing the VAR-DCC and is new to the wine literature and, importantly, allow us to capture the linear interdependencies among several time series, rather than focusing on one evolving variable (like in AR processes). Moreover, we considered daily data, while most of the prior studies limited their analyses to monthly data. As investors tend to diversify their investment across different assets, results of our analyse would be crucial input for investors in portfolio diversification and hedging their stock positions in traditional financial assets by investing in fine wines.

References

Baba Y., Engle R. F., Kraft D. F., Kroner K. F. (1990). Multivariate Simultaneous Generalized ARCH, Department of Economics, University of California at San Diego, Working Paper.

Baur, D. G., & Lucey, B. M. (2010). Is Gold a Hedge or a Safe Haven? An Analysis of Stocks, Bonds and Gold. The Financial Review 45(2010), p. 217-229.

Baur, D.G. (2012). Asymmetric volatility in the gold market. The Journal of Alternative Investments 14(4), p. 26-38.

Bollerslev, T. (1986). Generalized autoregressive conditional heteroscedasticity. Journal of Econometrics 31, p. 307-327.

Bollerslev, T. (1990). Modelling the Coherence in Short-Run Nominal Exchange Rates: A Multivariate Generalized ARCH Model. Review of Economics and Statistics, 72, p. 498-505.

Bollerslev, T., Chou, R., Kroner, K. (1992). ARCH modelling in finance. A review of the theory and empirical evidence. Journal of Econometrics 52, p. 5-59.

Bouri, E. (2014). Beyond the negative relation between return and conditional volatility in the

wine market. Is fine wine particularly luscious for investors? International Journal of Wine Business Research 26(4), p. 279-294.

Bouri, E., Gupta, R., Wong, W.-K., & Zhu, Z. (2018). Is wine a good choice for investment? Pacific-Basin Finance Journal 51 (2018), p. 171-183.

Bouri, E., & Roubaud, D. (2016). Fine Wines and Stocks from the Perspective of UK Investors: Hedge or Safe Haven. Journal of Wine Economics 11(2), 233-248.

Cardebat, J.-M.,& Jiao L. (2017). The long-term financial drivers of fine wine prices: The role of emerging markets. The Quarterly Review of Economics and Finance 67(2018), p. 347-361.

Engle, R. (1982) Autoregressive Conditional Heteroscedasticity with Estimates of the Variance of United Kingdom Inflation. Econometrica 50(4), p. 987-1007.

Engle, R. (2002). Dynamic Conditional Correlation: A Simple Class of Multivariate Generalized Autoregressive Conditional Heteroskedasticity Models. Journal of Business & Economic Statistics 20(3), p. 339-350.

Glosten, L., Jagannathan, R., & Runkle, D. (1993). On the relation between the expected value and the volatility of the nominal excess return on stocks. The Journal of Finance 48(5), p. 1779-1801.

Kroner K. F., Ng, V. K. (1998). Modelling asymmetric co-movements of asset return. *Review of Financial Studies*, 11 (Winter), 817-844.

Kroner, K.F., Sultan, J., (1993). Time-varying distributions and dynamic hedging with foreign currency futures. *J. Financ. Quant. Anal.* 28, 535–55.

Masset, P., & Henderson, C. (2010). Wine as an alternative asset class. Journal of Wine Economics 5(1), p. 87-118.

Masset, P., & Weisskopf, J.-P. (2010). Raise Your Glass: Wine Investment and the Financial Crisis. American Association of Wine Economists Working Paper 57.

Nelson, D. (1991). Conditional Heteroskedasticity in Asset Returns: A New Approach. Econometrica 59(2), p. 347-370.