

The Case for Investment Grade Wine as a Strategic Alternative Asset Class

The history of purchasing fine wine for investment goes back over 150 years and originated with the British, Dutch and the French. However, it wasn't until the creation of the London International Vintner's Exchange ("Liv-ex") in 1999 and the advent of the Liv-ex 100 Fine Wine Index in 2001 that sufficient market information became available to do a true comparative analysis of the investment grade wine market versus other asset classes.

The Wine Market: An Overview

The vast majority of the world's wine production is not suitable for investment. Short longevity, poor quality, large production volume and the absence of any meaningful price appreciation makes most wine not worthy of investment. In fact, investment grade wines makes-up less than 1% of the total worldwide wine market, with approximately 80% coming from the classified chateaux of Bordeaux. The remaining 20% of investment grade wines come from the top producers in Burgundy, the Rhone Valley, Champagne, and the regions of Tuscany and Piedmont in northern Italy. The characteristics that define an investment grade wine are:

Pedigree – The wine must be produced by a chateaux, domaine or producer whose name is synonymous with quality and prestige;

Longevity – The wine must be able to age for at least 25 years with maturity occurring after the 10th year;

Price Appreciation – The wine must have a consistent and documented history of substantial price appreciation over a decade or more;

Liquidity – The wine must be made in sufficient quantities so that it can be bought and sold on the secondary market; and

High Critical Acclaim – The wine generally must have been given a score of at least 95 points by one or more of the principal worldwide wine critics.

What Drives Investment Grade Wine Prices?

It is the persistent supply and demand imbalance within the investment grade wine market that makes investment grade wine a good investment. This imbalance is due to the following factors:

- The supply of investment grade wine is severely constrained due to the fact that it is produced in limited quantities. This constraint primarily is a result of the restrictive classification system and zoning laws imposed upon the top producers in Bordeaux and Burgundy.

- Worldwide demand for the top investment grade wines has significantly increased over the last decade due to the emergence of the “new wealthy” in China, Russia and other emerging markets who want to own these wines.
- Fine wine improves with age; thereby, becoming more attractive and valuable as it matures.
- As fine wine ages, it begins to be consumed, which increases both its scarcity and demand.

The combination of scarcity and ever increasing demand is what fuels the consistent price appreciation of the investment grade wine market.

The Advantages of Investing in Investment Grade Wine

The substantial price appreciation of the world’s finest investment grade wines over the last decade has done a lot to enhanced the attractiveness of this asset class. However, the investment grade wine market has far more to offer than its recent track record of impressive returns. The principal benefits of investing in investment grade wine include:

High Capital Growth: As shown in Table 1, the investment grade wine market (as represented by the Liv-ex 100 Index), has produced an annualized return of **11.33%** for the period of July 2001 (the index’s inception) through December 2011. This return is the third highest among all major non-fixed income asset classes. Only gold’s 18.28% annualized return and the Dow Jones-UBS Commodities Index’s 12.89% annualized return have outperformed investment grade wine on an absolute basis for this period.

Low Volatility: As shown in Table 1, the investment grade wine market (as represented by the Liv-ex 100 Index), produced the second lowest volatility of annualized monthly returns among all major non-fixed income asset classes for the period of July 2001 through December 2011. Only the 5.73% standard deviation of the Dow Jones-Credit Suisse Hedge Fund Index is lower than the **10.57%** standard deviation of the Live-ex 100 Index for this period.

Superior Risk-Adjusted Returns: As shown in Table 1, the investment grade wine market (as represented by the Liv-ex 100 Index), produced the second best risk-adjusted return (as measured by the Sharpe Ratio) among all major non-fixed income asset classes for the period of July 2001 through December 2011. Only the 1.11 Sharpe Ratio of the Dow Jones-Credit Suisse Hedge Fund Index surpassed the 1.07 Sharpe Ratio of the Liv-ex 100 Index.

Portfolio Diversifier: The goal of diversification is to reduce portfolio risk by holding a wide variety of assets that behave differently from one another under various market conditions. Data has suggested that equity markets tend to become more closely correlated during periods of market turbulence. However, the investment grade wine market historically has not moved in lockstep with the other major equity type asset classes, nor has it correlated strongly with hedge funds, gold or other commodities. As shown in Table 2, over the last 10½ years the Liv-ex 100 Index has had a correlation of

0.34 with the S&P 500 Index and a correlation of 0.13 and 0.26 with gold and the Dow Jones-UBS Commodities Index, respectively. These low cross-correlations suggest that adding a separate stand-alone allocation to investment grade wine may help to insulate a portfolio against events that broadly affect the equity and commodities markets.

Inflation Hedge: Investment grade wine is a tangible and consumable asset, which typically do well in times of rising inflation. As shown in [Table 2](#), over the last 10½ years the Liv-ex 100 Index has had a low but positive correlation of 0.32 with the US Consumer Price Index. This suggests that over the last decade, the price of the investment grade wine market has not been significantly affected by the movement in the US inflation rate. Accordingly, the slight positive correlation with US-CPI suggests that investment grade wine may provide an effective hedge against an increase in the US inflation rate.

Currency Hedge: The purchase and sale of investment grade wine in foreign countries such as the United Kingdom, continental Europe and Asia, can provide US investors with a hedge against a decline in the value of the dollar.

Personal Ownership of a Tangible Asset: Wine is a tangible, transportable and consumable asset. Thus, it is extremely versatile in that it can be purchased purely for investment as well as for personal consumption and enjoyment.

Potential Tax Free Investment (UK Investors): The taxing authorities in the UK consider fine wine to be a “wasting asset,” and thus, do not impose capital gains tax on the purchase and sale of fine wine held in “bond.” Moreover, if wine is purchased and sold in “bond” in the UK it will not be subject to value added tax (VAT) or import duty. Unfortunately, the United States has not adopted a similar approach. Therefore, the purchase and sale of fine wine by US investors may be subject to US capital gains tax.

Table 1: Comparative Performance – Liv-ex 100 Index vs. all Major Non-Fixed Income Asset Classes

Period: 7/2001 - 12/2011	Liv-ex 100 Index	S&P 500 Index	S&P Sm. Cap 600 Index	MSCI- EAFE Index	MSCI - Emerging Markets Index	DJ-UBS Commodities Index	Gold (London PM Fix)	NAREIT Equity REIT Index	DJ-CS Hedge Fund Index
Annualized Return	11.3%	0.4%	5.9%	1.3%	11.3%	12.9%	18.3%	4.6%	6.4%
Standard Deviation	10.6%	15.1%	20.4%	18.6%	24.6%	18.2%	17.5%	25.2%	5.7%
Sharpe Ratio	1.07	0.10	0.38	0.16	0.56	0.76	1.06	0.31	1.11
Downside Risk	6.2%	10.4%	12.6%	12.2%	15.0%	10.9%	9.7%	16.9%	3.6%
Sortino Ratio	1.84	0.15	0.63	0.25	0.92	1.28	1.92	0.46	1.77
Max. 12-Month Return	58.5%	51.2%	62.5%	53.9%	87.5%	53.9%	57.6%	97.4%	21.2%
Min. 12-Month Return	-18.9%	-42.5%	-43.4%	-51.8%	-57.6%	-43.2%	-7.4%	-60.7%	-19.1%

Source: Trellis Fine Wine Investments, LLC.

Table 2: Cross-Correlations of Monthly Returns - Liv-ex 100 Index vs. all Major Non-Fixed Income Asset Classes and Inflation

Period: 7/2001 - 12/2011	Liv-ex 100	S&P 500	US Sm. Cap Equities	Foreign Equities	Emerging Market Equities	Commodities	Gold	US Real Estate	Hedge Funds	US Inflation (CPI)
Liv-ex 100	1.00	0.34	0.24	0.29	0.26	0.26	0.13	0.26	0.37	0.32
Inflation	0.32	0.06	0.01	0.03	0.02	0.25	0.06	0.08	0.22	1.00

Source: Trellis Fine Wine Investments, LLC.

Active Management Can Do Better than the Market Index

We back-tested the performance of our Selected Investment Grade Bordeaux Strategy against the performance of the Liv-ex 100 Index for the period from the index's inception (July 2001) through December 2011 in order to determine whether an active rule based investment strategy could produce better absolute and risk-adjusted returns compared to the broader investment grade wine market. Unlike the Liv-ex 100 Index which represents the price appreciation of the 100 most highly traded investment grade wines from the last 25 physical vintages, our Selected Investment Grade Bordeaux Strategy is a more focused strategy that invests only in the 3 highest rated first-growth classified investment grade Bordeaux and the 3 highest rated non-first-growth classified investment grade Bordeaux in each of the last 12 qualifying physical vintages.

As presented in Table 3, the results of our comparative back-test show that our Selected Investment Grade Bordeaux Strategy produced substantially better absolute and risk adjusted returns compared to the Liv-ex 100 Index.

Table 3: Comparative Performance - Trellis Selected Investment Grade Bordeaux Strategy vs. the Liv-ex 100 Index

Period: 7/2001 - 12/2011	Trellis Selected Brdx. Strategy	Liv-ex 100 Fine Wine Index
Average Annualized Return	*17.08%	11.33%
Standard Deviation	12.09%	10.57%
Sharpe Ratio	1.40	1.07
Downside Risk	5.44%	6.16%
Sortino Ratio	3.10	1.84
Max. 12-Month Return	94.74%	58.47%
Min. 12-Month Return	-15.56%	-18.89%

Source: Trellis Fine Wine Investments, LLC.

**Gross return, excludes fees and transaction costs.*

Moreover, as shown in Tables 4 and 5, our Selected Investment Grade Bordeaux Strategy produced substantially better absolute and risk adjusted returns, with lower correlations, compared to all of the major non-fixed income asset classes, including gold, commodities and hedge funds. This data suggests that the benefits associated with adding investment grade wine to a diversified portfolio can be further enhanced by utilizing an active investment approach similar to our Selected Investment Grade Bordeaux Strategy.

Table 4: Comparative Performance - Trellis Selected Investment Grade Bordeaux Strategy vs. the Liv-ex 100 Index and all Major Non-Fixed Income Asset Classes

Period: 7/2001 - 12/2011	Trellis Selected Brdx. Strategy	Liv-ex 100 Index	S&P 500 Index	S&P Sm. Cap 600 Index	MSCI- EAFE Index	MSCI - Emerging Markets Index	DJ-UBS Commodities Index	Gold (London PM Fix)	NAREIT Equity REIT Index	DJ-CS Hedge Fund Index
Annualized Return	*17.1%	11.3%	0.4%	5.9%	1.3%	11.3%	12.9%	18.3%	4.6%	6.4%
Standard Deviation	12.1%	10.6%	15.1%	20.4%	18.6%	24.6%	18.2%	17.5%	25.2%	5.7%
Sharpe Ratio	1.40	1.07	0.10	0.38	0.16	0.56	0.76	1.06	0.31	1.11
Downside Risk	5.4%	6.2%	10.4%	12.6%	12.2%	15.0%	10.9%	9.7%	16.9%	3.6%
Sortino Ratio	3.10	1.84	0.15	0.63	0.25	0.92	1.28	1.92	0.46	1.77
Max. 12-Month Return	94.7%	58.5%	51.2%	62.5%	53.9%	87.5%	53.9%	57.6%	97.4%	21.2%
Min. 12-Month Return	-15.6%	-18.9%	-42.5%	-43.4%	-51.8%	-57.6%	-43.2%	-7.4%	-60.7%	-19.1%

Source: Trellis Fine Wine Investments, LLC.

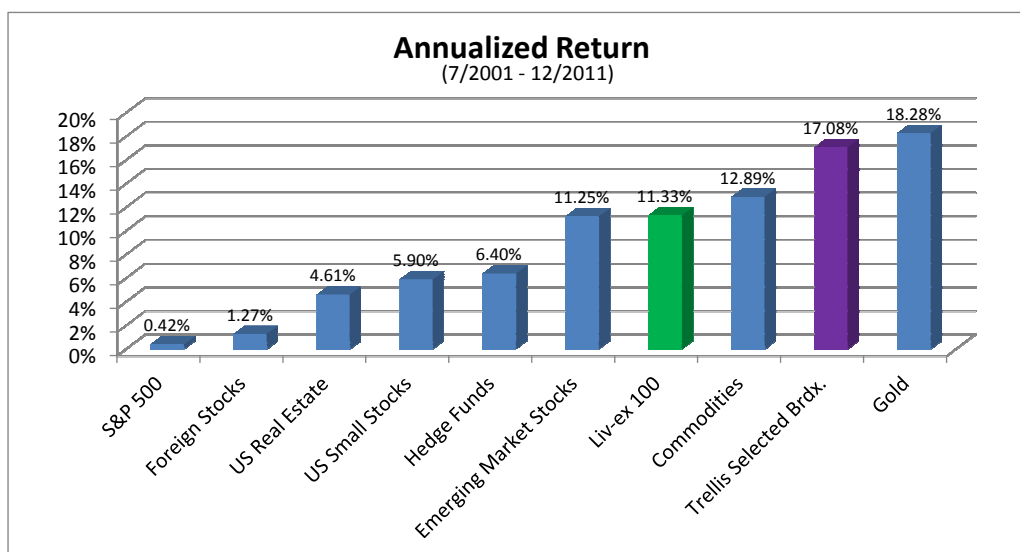
*Gross return, excludes fees and transaction costs.

Table 5: Cross-Correlations of Monthly Returns - Trellis Selected Investment Grade Bordeaux Strategy vs. the Liv-ex 100 Index and all Major Non-Fixed Income Asset Classes and Inflation

Period: 7/2001 - 12/2011	Liv-ex 100	S&P 500	US Sm. Cap Equities	Foreign Equities	Emerging Market Equities	Commodities	Gold	US Real Estate	Hedge Funds	US Inflation (CPI)	Trellis Selected Brdx. Strategy
Liv-ex 100	1.00	0.34	0.24	0.29	0.26	0.26	0.13	0.26	0.37	0.32	0.65
Trellis Selected Brdx. Strategy	0.65	0.18	0.12	0.14	0.14	0.17	-0.07	0.07	0.19	0.13	1.00
Inflation	0.32	0.06	0.01	0.03	0.02	0.25	0.06	0.08	0.22	1.00	0.13

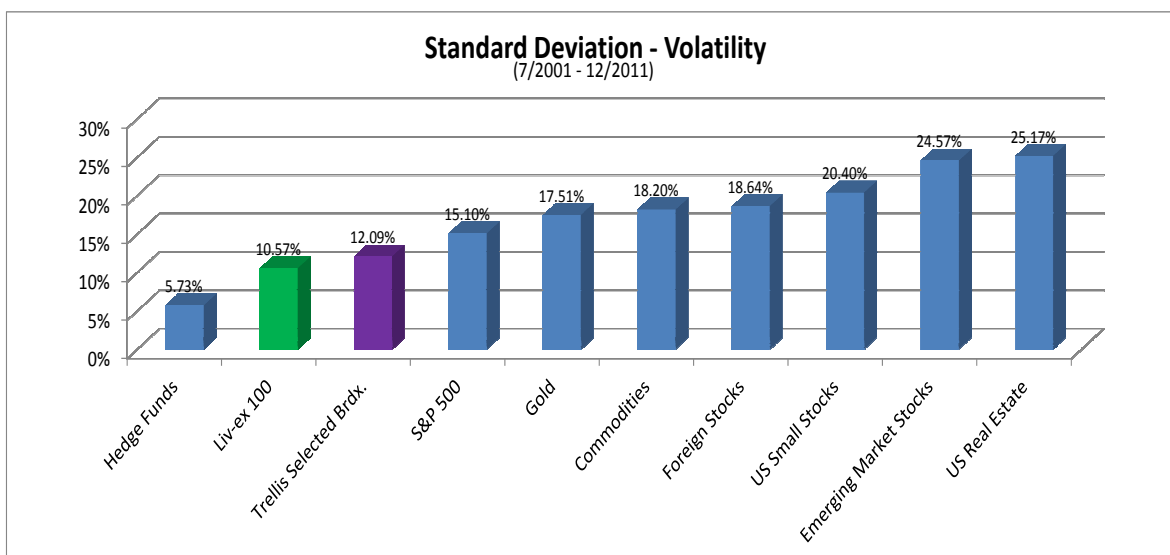
Source: Trellis Fine Wine Investments, LLC.

Graph 1: Annualized Returns - Trellis Selected Investment Grade Bordeaux Strategy vs. the Liv-ex 100 Index and all Major Non-Fixed Income Asset Classes



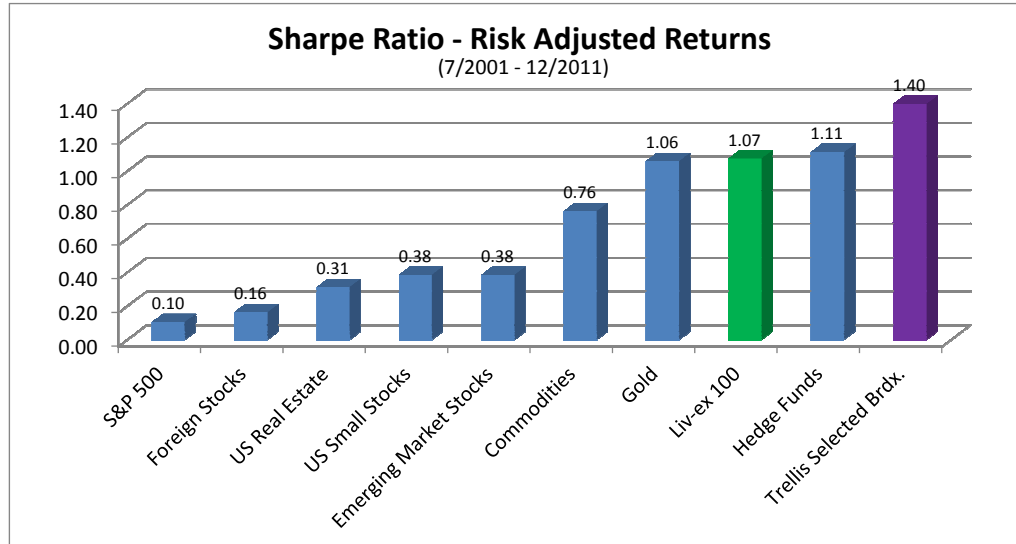
Source: Trellis Fine Wine Investments, LLC.

Graph 2: Annualized Monthly Standard Deviation - Trellis Selected Investment Grade Bordeaux Strategy vs. the Liv-ex 100 Index and all Major Non-Fixed Income Asset Classes (Lower the Better)



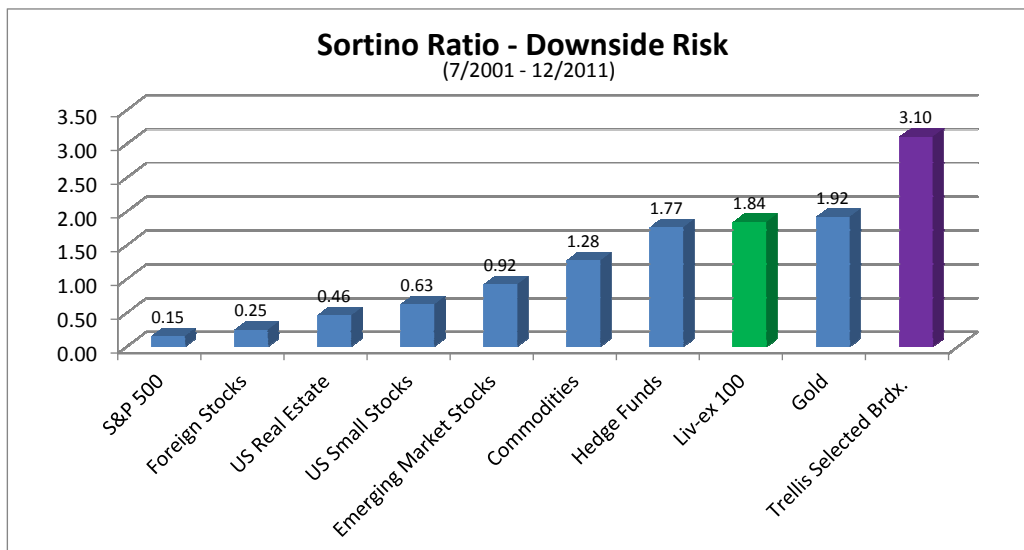
Source: Trellis Fine Wine Investments, LLC.

Graph 3: Shape Ratio - Trellis Selected Investment Grade Bordeaux Strategy vs. the Liv-ex 100 Index and all Major Non-Fixed Income Asset Classes (Higher the Better)



Source: Trellis Fine Wine Investments, LLC.

Graph 4: Sortino Ratio - Trellis Selected Investment Grade Bordeaux Strategy vs. the Liv-ex 100 Index and all Major Non-Fixed Income Asset Classes (Higher the Better)



Source: Trellis Fine Wine Investments, LLC.

Conclusion: Excellent Absolute and Risk Adjusted Returns Combined with Low Correlation with Traditional and Alternative Asset Classes Makes Investment Grade Wine an Excellent Portfolio Diversifier

Adding a strategic allocation to investment grade wine within a diversified portfolio can offer a number of potential benefits to investors, including: a hedge against stock market volatility, worldwide inflation and a decline in the US dollar; low correlation with traditional and alternative asset classes such as real estate, gold, commodities and hedge funds; and the security associated with the personal ownership of a tangible asset. Moreover, these benefits can be further enhanced by utilizing an active investment approach similar to our Selected Investment Grade Bordeaux Strategy.

* * *

Definitions:

“Correlation” or “Correlation Coefficient:” This statistic describes the variability of asset returns relative to other assets for the purpose of asset allocation. It is used as a measure of the diversification potential of an asset class. For example, a correlation of 1.00 indicates that the monthly returns of two asset classes move in the same direction for a specific time period. Conversely, a correlation of -1.00 means that the monthly returns of two asset classes move in opposite directions. A correlation of zero indicates that the monthly returns of two asset classes exhibit no discernible relationship.

“Liv-ex:” Established in 1999, the London International Vintner’s Exchange, or Liv-ex, is the leading exchange for professional fine wine merchants, collectors and investors. In addition to providing trade execution and settlement services, Liv-ex also provides valuation services and sells data to both professional wine traders and collectors.

“Sharpe Ratio:” This is a measure of the risk-adjusted returns of an investment. It is calculated by subtracting the risk-free rate from the average annual rate of return and dividing the result by the investment’s standard deviation. In practice, this ratio is used to compare the risk-adjusted returns of two or more investments, with the one having the highest Sharpe Ratio being the one with the best risk-adjusted returns.

“Sortino Ratio:” The Sortino Ratio is a modified version of the Sharpe Ratio and is used to measure the historical downside volatility of an investment in relation to its historical returns. It is calculated by subtracting the risk-free rate from the average annual rate of return and dividing the result by the investment’s downside standard deviation (i.e., standard deviation of negative returns). Like the Sharpe Ratio, the Sortino Ratio is used to compare the risk-adjusted returns of two or more investments, with the one having the highest Sortino Ratio being the one with the best downside risk-adjusted returns.

“Standard Deviation:” This is a measure of the dispersion of returns of an investment, or the extent to which the returns vary from the mean average. It represents the volatility or risk of an investment, with investments having higher standard deviations being considered more risky.

Disclaimers: Trellis Fine Wine Investments, LLC does not recommend the purchase or sale of any securities or provide individual investment advice with regard to any assets other than investment grade wine. Accordingly, Trellis Fine Wine Investments, LLC is not a registered investment advisor and is not regulated by the US Securities and Exchange Commission or any state securities regulatory agency. No information contained herein is intended to provide investment or tax advice. Prior to investing in fine wine you should consult with your financial and tax advisors to make sure that an investment in fine wine is appropriate given your individual circumstances. You cannot invest in an index. **As with any investment, investing in fine wine entails risk. You could lose money investing in fine wine.**

© 2012 Trellis Fine Wine Investments, LLC. All Rights Reserved.

Contact: For more information on the investment grade wine market and/or our strategies and services, please contact:

Mark E. Ricardo, JD, LLM, AAMS™
President - Trellis Fine Wine Investments, LLC
300 North Washington Street, Suite 405
Alexandria, Virginia 22314
Telephone: (703) 740-1763
www.trelliswineinvestments.com