2017

BORDEAUX 2016: A NEW DAWN FOR EN PRIMEUR?

March 2017

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En Primeur in its current form is a relatively new system, but Bordeaux wines have been traded prior to delivery for centuries. This continues to represent a significant opportunity for producers, merchants and buyers. En Primeur can help producers to improve their cash flow and reduce their risk profile, while offering buyers the opportunity to acquire stock at favourable prices. It is the one time each year that all eyes in the trade are on Bordeaux and remains a highly effective global marketing and distribution mechanism.

Transparency presents an opportunity

One of the most significant changes in the fine wine market in the past decade has been improved price transparency, facilitated by the internet. Now, merchants and their customers can instantly access current and historic prices for fine wines to inform their purchasing decisions. The market has also become increasingly global and accessible, meaning that buyers have easy access to older vintages, and hence more choice.

The problem with opacity

While the rest of the market has become increasingly transparent, En Primeur prices continue to be determined - or ‘discovered’ - via private negotiations between chateaux, courtiers and negociants. It is often unclear how prices are set. This has two key disadvantages.

First, buyers have little or no insight into how prices are agreed. This has resulted in criticism of the En Primeur system amongst buyers and, as this report shows, falling sales. Second, the system runs the risk of mispricing releases. This report uses the term ‘mispriced’ to mean pricing that was inconsistent with prices in the secondary market at that time. In the last decade, releases have been as much as 30% over or under priced, potentially costing the industry hundreds of millions of Euros.

A new consensus on pricing is needed

This report introduces Liv-ex’s ‘fair value’ methodology, which harnesses the transparency of the secondary market, to allow for a more scientific evaluation of En Primeur prices. The trade and their customers can use ‘fair value’ during En Primeur to help identify wines which offer the greatest value and avoid those which offer the least. It may also contribute to a new consensus around pricing En Primeur and help Bordeaux reinvent itself in the internet age.

A new dawn for En Primeur

The 2016 vintage is being released at an interesting time for the Bordeaux market. After several difficult years, the Bordeaux 500 index has gained 22% in the past 12 months. Official figures suggest that 2016 was the largest harvest in over a decade, and expectations for the quality of the wines are high. Put simply, if the price is right, 2016 represents a significant opportunity for the whole market.

En Primeur is worth keeping

There is much scepticism around En Primeur among the trade, press and consumers. Chateau Latour has withdrawn from the system completely. There has been a commensurate fall in demand too since the heady days of 2010 and 2011. Despite this, the system is worth keeping. At its best, En Primeur is the wine industry's most effective global marketing and distribution machine and can be accessed at relatively low costs.

En Primeur has existed and evolved in Bordeaux, in one form or another, for centuries. Historically, producers sought to improve their cash flow and reduce their risk profile by forward-selling a portion of their output. In return for parting with their cash early and sharing risk with producers, buyers were able to acquire stock at favourable prices.

The cash flow benefits of En Primeur can be particularly important for smaller producers whose financial position is often less robust than the larger ones. The most powerful chateaux typically boast much stronger balance sheets. Ultra-low interest rates also allow these producers to finance working capital cheaply. However, as interest rates rise again, so too will the working capital benefits of En Primeur.

Overall, a well-functioning En Primeur market brings considerable benefits to both buyers and sellers. Unfortunately, it is not functioning as well as it could. In the post-Parker era, a new consensus needs to be found if the system is to be rejuvenated.

The price mechanism does not work as well as it could

En Primeur prices are determined via negotiations between chateaux, courtiers and negociants. The wines are often released in several tranches in order to test the market and aid price discovery. The system has two major disadvantages:

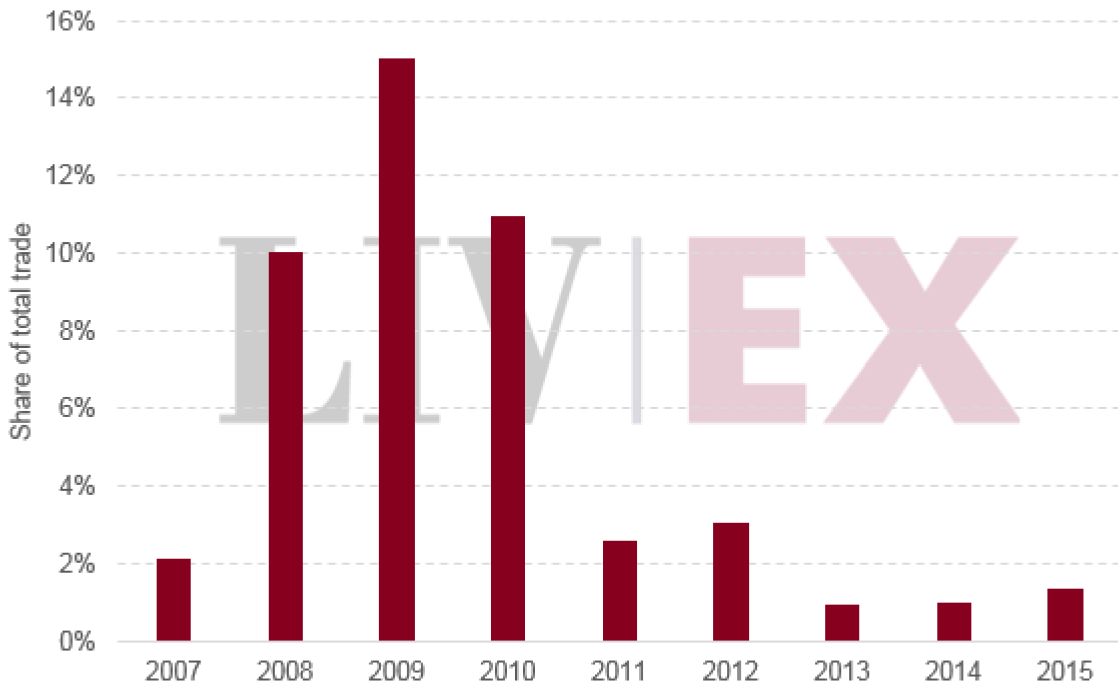
1. Price discovery is opaque. Negotiations over prices are held behind closed doors. Buyers therefore have little, or no, insight into how any particular price is determined.

2. The system is inefficient and often results in prices being set either too high or too low. Negociants often see little alternative to accepting overpriced En Primeur for fear of losing their allocation in the future.

If the price of En Primeur is set too high then producers or their agents may be left with excess stock. If the price is too low then producers are effectively handing a slice of their profits to buyers. For example, our analysis suggests that the 2008 En Primeur campaign was nearly 30% underpriced, handing a windfall of nearly €300 million to the supply chain (assuming En Primeur sales of up to €1 billion in 2009).

Inefficiency and lack of transparency have eroded confidence. The chart below shows that En Primeur activity on Liv-ex remains well below historic levels. A number of Liv-ex members report similar falls in activity in the market overall.

En Primeur sales on Liv-ex as percentage of total sales (by campaign*)



*En Primeur sales measured from start of campaign to end of March the following year

How might En Primeur evolve?

The internet has brought much greater transparency to fine wine prices and to trading in the secondary market. Efficient secondary market pricing for fine wine - or any other financial market - essentially takes into consideration all available information about present and potential future events.

The secondary market in fine wine is not as liquid as other markets such as equities, foreign exchange or commodities. There is also a significant difference between the liquidity of wines such as the First Growths and smaller producers whose wine trades less frequently. However, the secondary market is already a more transparent and efficient mechanism for pricing fine wine than the private negotiations held at En Primeur.

Fine wine shares many of the characteristics of commodities. Different producers and vintages represent different commodities. For example, a tonne of copper traded on the London Metal Exchange (LME) is identical to any other tonne of copper traded on the LME. This is because the LME maintains strict physical specifications for the copper traded.

Similarly, a case of Lafite Rothshild 2010 traded on Liv-ex is identical to any other case of Lafite Rothshild 2010 traded on Liv-ex. This is because Liv-ex's Standard in Bond (SIB) contract ensures that any wine traded on the platform is in excellent condition, has never left Europe, is stored under bond and can be delivered within 14 days to a Liv-ex warehouse.

The evolution of pricing in other markets is likely to provide some guidance for En Primeur. In fact, the transition from opaque, negotiation-led prices to transparent, market-based prices is a well-trodden path.

For example, the negotiation-led ‘benchmark’ system for annual iron ore prices collapsed in 2010 as an increasingly liquid spot market took its place. Similar changes in other commodity markets such as oil occurred long before.

En Primeur can also be compared to primary share issues in equity markets. Let’s consider a listed company such as Apple that issues new shares. These new shares cannot typically be priced higher than the price of Apple’s existing shares in the secondary market. This is because investors would simply buy Apple shares in the secondary market rather than participate in the new share offering.

This should also be true for En Primeur. After all, why should investors buy riskier En Primeur if they could buy physical back vintages in the secondary market for a lower price?

Of course, the key issue with the Apple analogy is that new shares in Apple are identical to ‘old’ shares in Apple. Therefore, comparing prices is easy. However, variations in critic score, vintage quality and age mean that each vintage of a particular wine is different. Therefore, comparing prices is not so easy. This is where Liv-ex’s ‘fair value’ methodology can help.

Liv-ex’s ‘fair value’ methodology

Liv-ex uses regression analysis[1] to map the relationship between prices and critic scores. Taking Margaux as an example below, scores (Wine Advocate) and prices of the last 11 vintages are plotted against each other to create a trend line.

Liv-ex’s ‘fair value’ methodology accounts for the fact that the relationship between price and critic score for most of Bordeaux’s fine wine is not linear. Beyond a certain score, the relationship between price and score is typically exponential. This means that additional points have an increasingly large impact on price. However, additional points for lower scoring wines have little or no impact on price.

The R-squared value is used to measure how close data points are to the fitted regression line. R-squared is always between 0 and 100%. In general, the higher the R-squared, the better the regression line (or ‘trend line’) fits the data. For example, the R-squared in the Margaux model below is 92.2% which represents an extremely close fit. In statistical terms, the R-squared measures how much of the variation in price can be explained by variations in score.

For models that have a high R-squared - generally a value above 50% - the trend line can be used to estimate a ‘fair value’ for a particular wine given its score. The model can also be used to identify potential pricing anomalies in the secondary market. Vintages that lie above the trend line are assumed to be trading at a premium to ‘fair value’, while those below it at a discount. In the example below, the 96-point Margaux 2012 appears to be priced significantly below the trend line and might therefore offer value to buyers.

Similarly, the trend line can be used to approximate a Market Price for an En Primeur wine once it has been scored. In the example below, if Neal Martin awards the 2016 Margaux (En Primeur) a score of 96-98 points, then the trend line suggests a fair value of £4,800 (using the mid-point score of 97).

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[1] Regression analysis is a statistical process for estimating the relationships among variables, in this case between the Market Price (dependent variable) and Wine Advocate critic score (independent variable).

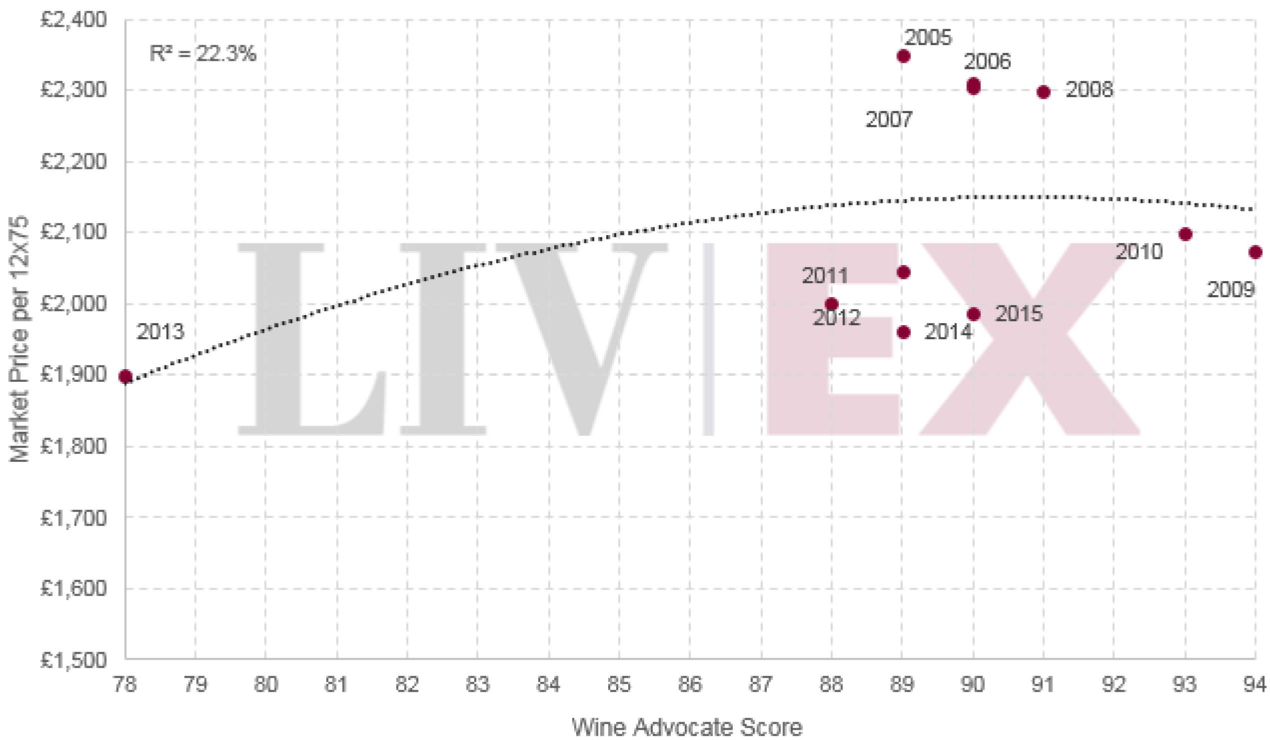
Margaux: ‘fair value’ analysis

However, buying En Primeur is riskier than buying back vintages in bottle. Therefore, it is expected that En Primeur would be priced at a discount to the trend line, on average. Of course, there will be exceptions to this. For example, a 96-point wine in an exceptional vintage may warrant a ‘vintage premium’ to the price of the same 96-point wine in an average vintage, as this report demonstrates later. In these cases, ‘fair value’ represents a valuable and transparent starting point for subsequent negotiations over that premium.

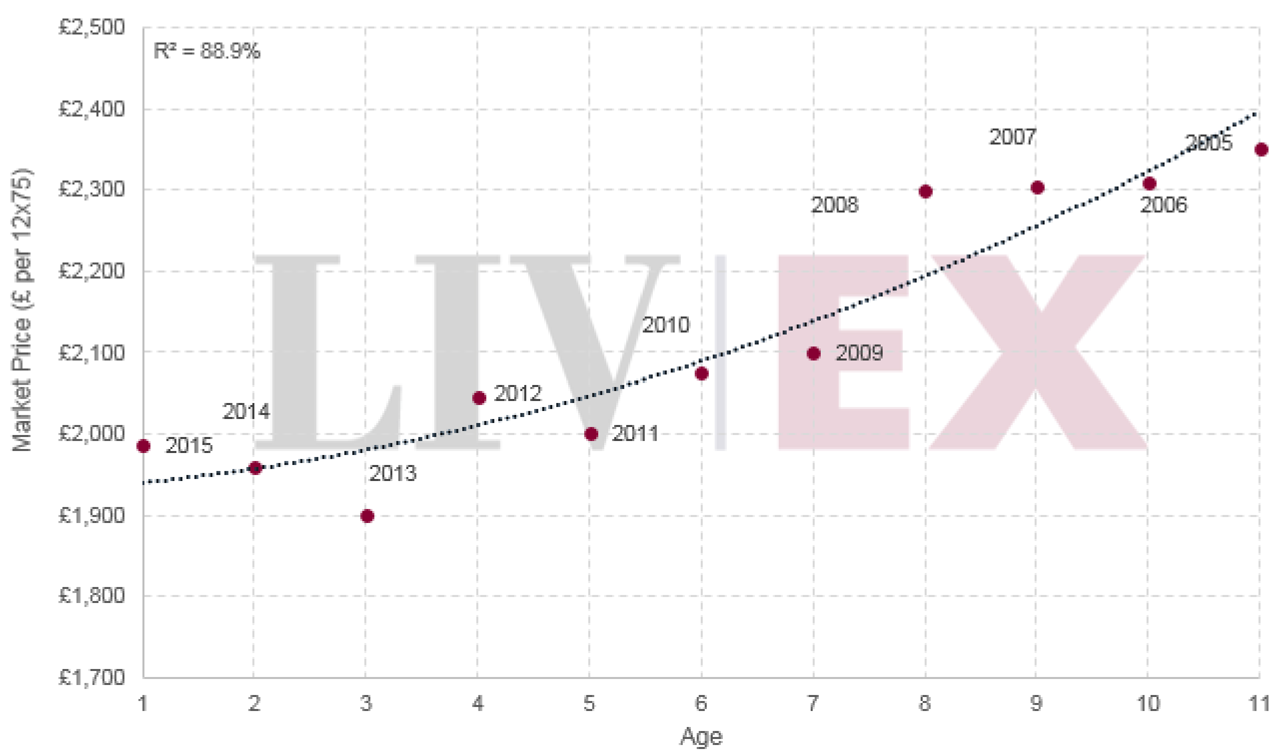
For some wines such as the second wines of the First Growths, age has a greater influence on price than score does. This may be because buyers are seeking exposure to a particular brand and are prepared to pay a premium based on age.

The charts below illustrate that prices for Carruades Lafite are more closely correlated to their age (88.9%) than their score (22.3%), suggesting that age is the key influencer of price.

Carruades Lafite shows very little correlation between price and score



Carruades Lafite prices are highly correlated to age



What are the limitations of 'fair value'?

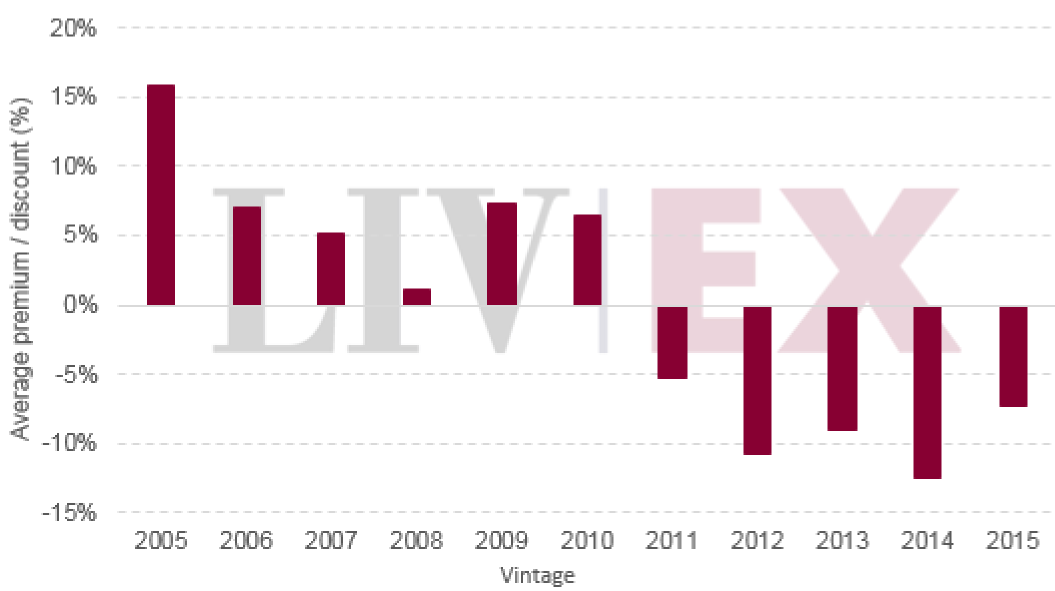
Liv-ex's 'fair value' methodology is intended to be simple and transparent. It uses information from the secondary market to help identify a fair price for a wine, given its score. If more appropriate, its age is used instead. In order to use 'fair value' effectively, users must also understand its limitations.

The model does not account for differences in 'vintage premiums' over and above that already captured by differences in score. As in the previous example, a 96-point wine in an exceptional vintage may warrant a premium to the price of an identical 96-point wine in an average vintage. This means that the data in the regression models is somewhat biased.

An attempt can be made to quantify this bias by looking at the average premium or discount to the trend line across vintages. This is shown in the chart below using wines from Liv-ex Fine Wine 50 and Liv-ex Left Bank 200 indices. For example, wines from the exceptional 2009 and 2010 vintages trade at an average premium to their trend lines of 7.3% and 6.5%, respectively.

In theory, a more complicated regression model could be built to account for such bias. In practice, we prefer to keep the model as simple as possible at this stage.

Physical vintage premiums (Fine Wine 50 and Left Bank 200)



Our model also does not account for differences in age. Older wines are likely to trade at a premium to younger wines of the same score and vintage quality. Indeed, the chart above actually captures age premium as well as vintage premium.

Some of the bias due to differences in age is mitigated by limiting the regression models to the past 11 vintages. Also, age is simply substituted for score in regression models where age is more significant in explaining variations in price.

The regression models do not have to be based on *either* age or score. Both age and score could be incorporated into the regression model as independent variables. However, as before, we prefer to keep the model as simple as possible.

The sample size in the regression models is limited as only the past 11 vintages are considered. This is to reduce any bias due to differences in age. However, small sample sizes may magnify any errors in the models.

It is assumed that either score or age is the predictor variable as opposed to the other way around. However, a wine's score may also be influenced by its price, unless it is tasted blind. In theory, individual critic scores may also be influenced by existing scores from other critics.

The regression model only considers scores from *The Wine Advocate*. It uses the most recent score for each wine from either Robert Parker or Neal Martin. The recent retirement of Parker presents two key issues:

1. Scores from *The Wine Advocate* represent a mix of scores from Parker and Martin. They are generally from Parker up to the 2013 vintage, and Martin from 2014 onwards. However, Parker and Martin have some different preferences which may lead to errors in the models.

2. It is generally accepted that Parker had far more influence over fine wine prices than any other critic. As such, it remains to be seen whether any other critic will match this level of influence. Alternatively, wine prices may be determined by the consensus opinion of a number of critics.

It is likely that future wine prices may be influenced more by consensus opinion rather than any individual critic. The 'fair value' model can be modified to reflect consensus opinion as the transition from Parker becomes clearer.

En Primeur has often been mispriced

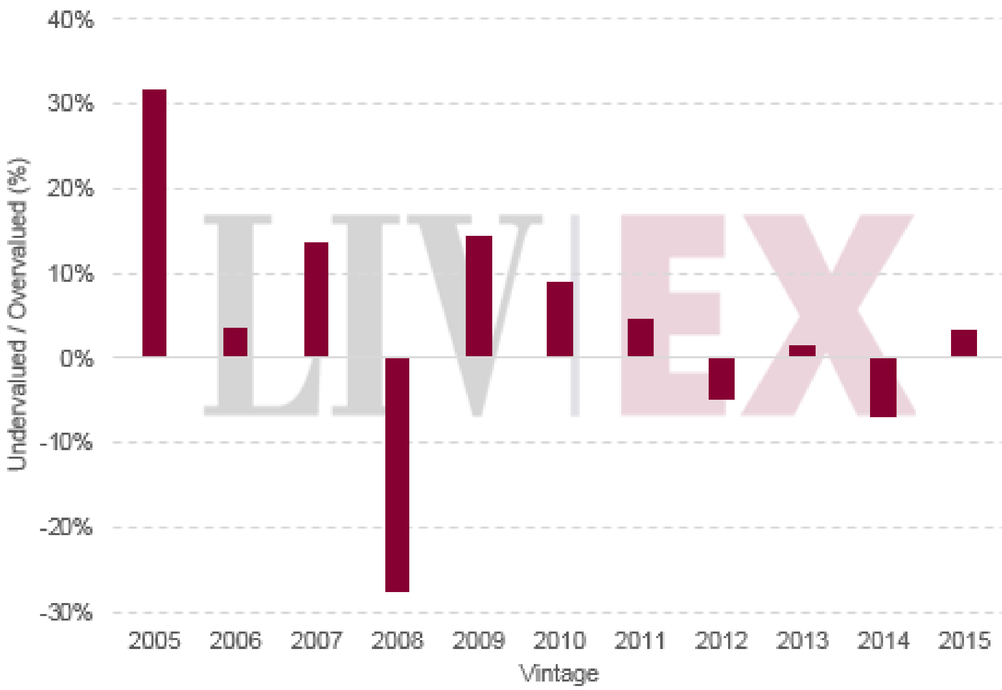
'Fair value' can measure the extent of any mispricing at En Primeur historically. The term 'mispricing' is used to mean pricing that was inconsistent with prices in the secondary market at that time. To be clear, En Primeur is not necessarily 'mispriced' just because prices subsequently fell and investors lost money. That is simply the risk that investors accept for an expected return.

Liv-ex has analysed the past eleven En Primeur releases for each of the wines in the Bordeaux 500 index. Using 'fair value' analysis, each release price was modeled against the past ten vintages of that wine in the secondary market at that time. Next, the difference between each release price and the price suggested by each wine's trend line was calculated. Finally, the results across each vintage were averaged.

The results of this analysis are shown in the chart below. For example, the chart shows that 2005 En Primeur was the most overvalued vintage at En Primeur in the past eleven years. This is because it was released at an average of 32% above prices suggested by the trend line at that time. Conversely, 2008 En Primeur was the most undervalued En Primeur of the past eleven years. It was released at an average of 28% below prices suggested by the trend line at that time. Although, this might be partly accounted for by the fact that scores from Robert Parker were released late and were higher than expected.

It is interesting that 2010 En Primeur may not have been as overpriced as is commonly thought. Although it was released above the trend line, it was at least an exceptional vintage. That prices for the 2010s went on to drop significantly is unlikely to be due to any mispricing at En Primeur. Rather, it should be viewed in the context of price declines across the entire fine wine market.

En Primeur release price vs ten previous vintages at time of release (Bordeaux 500)*

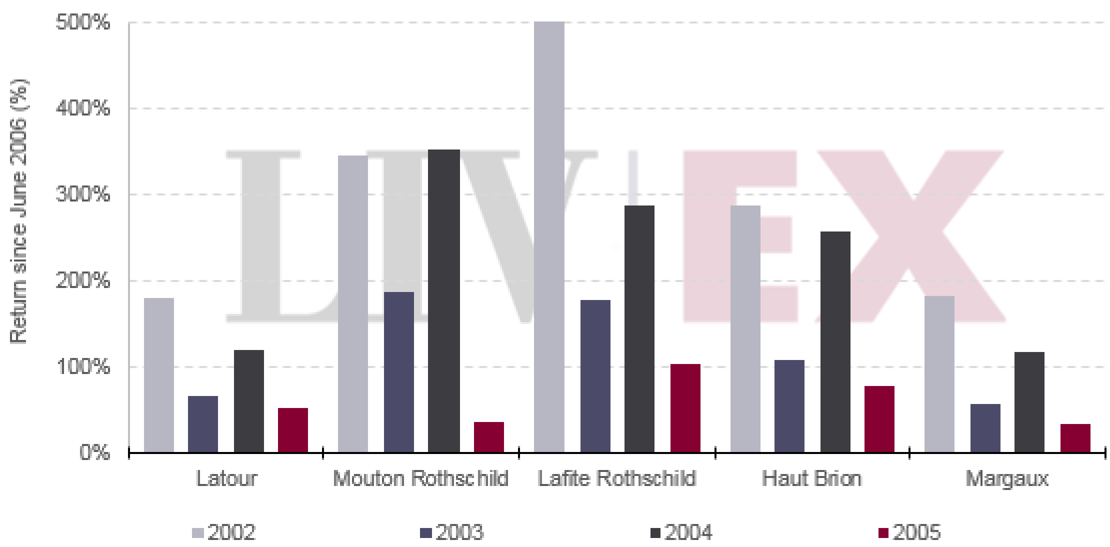


*** Excludes Sauternes and second wines**

So what does this analysis mean in practice? In short, it means that investors should have ignored an overpriced 2005 En Primeur and bought back vintages in the secondary market instead. In fact, the chart below shows that buying any of the three most recent back vintages for any of the First Growths would have outperformed 2005 En Primeur.

For example, let's consider Mouton Rothschild in the chart below. An investment in 2005 En Primeur would now be yielding a 36.3% return. However, investments in the 2002 and 2003 back vintages at the same time would be yielding far higher returns of 344% and 189% respectively. Even the 2004, that was still En Primeur at the time, would be have yielded a far superior return of 352%.

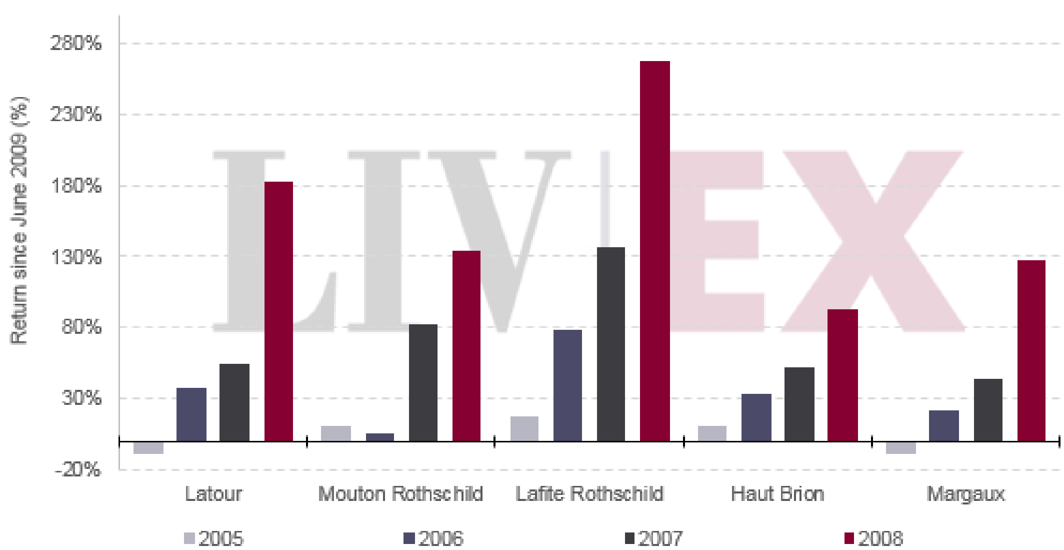
Vintage returns if purchased at 2005 En Primeur release (June 2006)



In contrast, 2008 En Primeur outperformed any of the three most recent back vintages for any First Growth, as the chart below shows. Therefore, investors would have been well advised to participate in 2008 En Primeur.

It must be noted that 2008 En Primeur was unusual in that Robert Parker released his scores *after* wines had been priced. Parker's scores were higher than the market had been expecting and prices subsequently increased sharply.

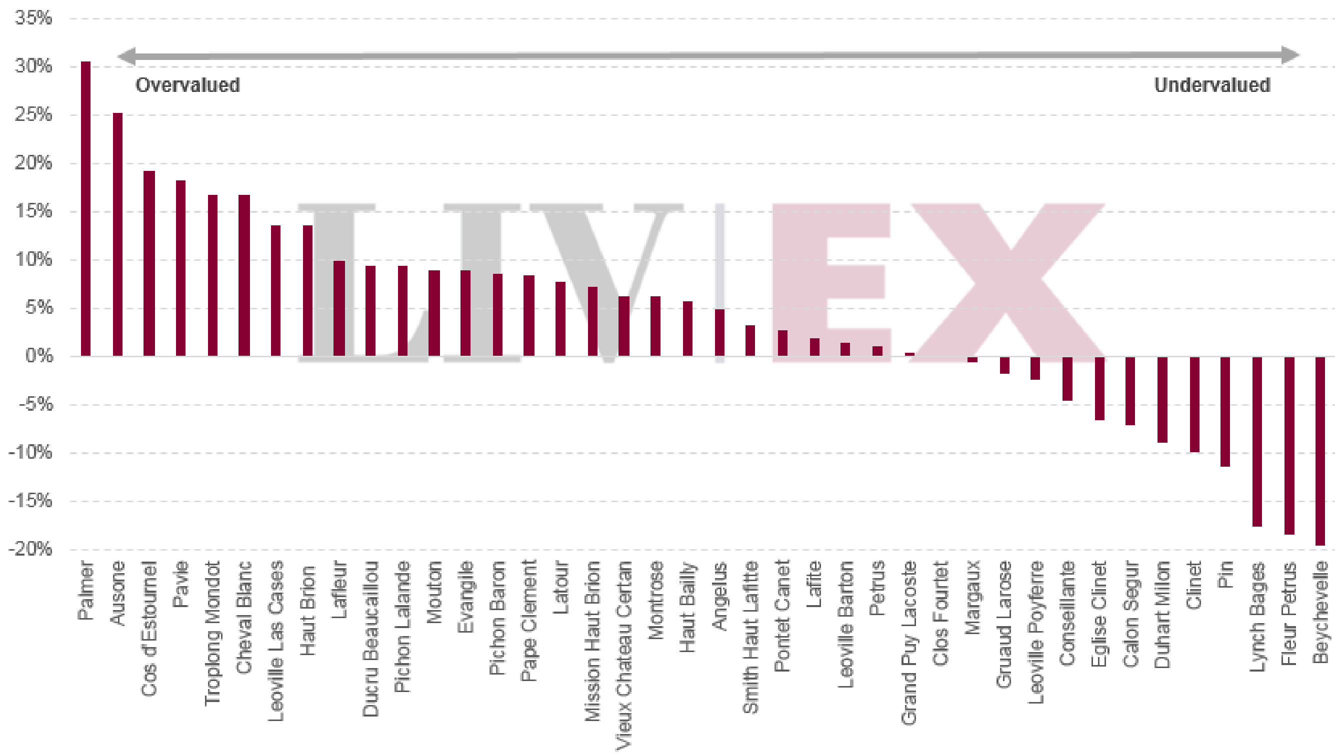
Vintage returns if purchased at 2008 En Primeur release (June 2009)



In the same way that 'fair value' analysis can be used to identify which vintages were over or underpriced on average at En Primeur, the model can also show how individual chateau have priced their releases historically.

The chart below shows which Chateau have historically overpriced or underpriced their releases the most, relative to other vintages from the same Chateau available in the secondary market. For example, it suggests that Palmer releases have been around 30% above their 'fair value' on average. On the other hand, Beychevelle has been underpriced by around 20% on average.[2]

Bordeaux chateaux: most overvalued and undervalued on average on release



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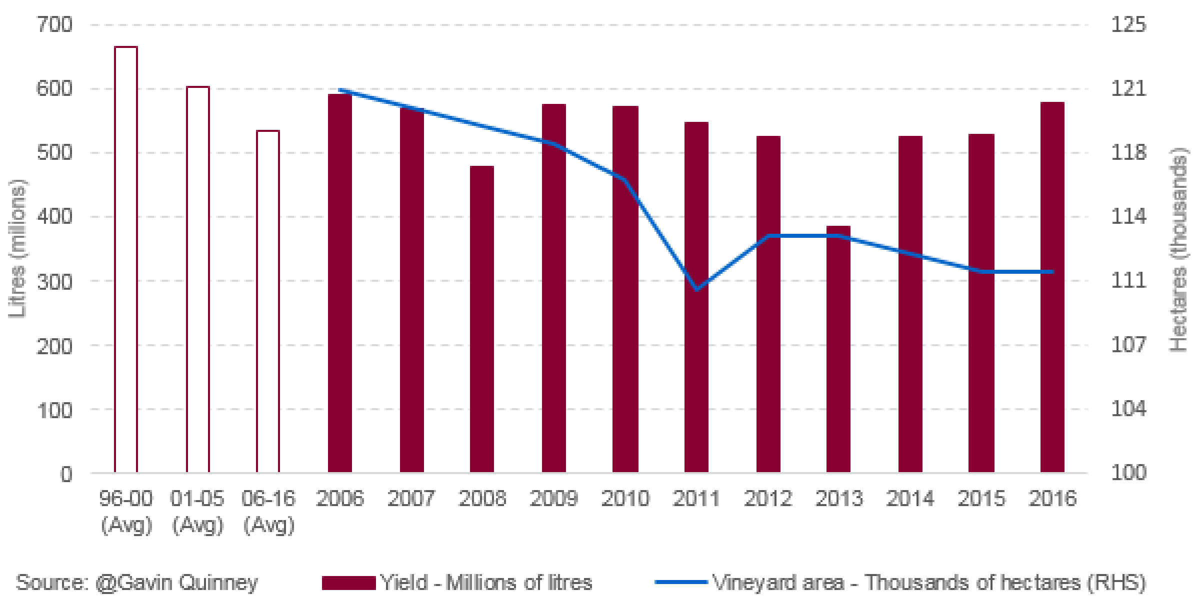
[2] This analysis uses data from the most recent 11 vintages of each wine. For Latour, this is 2001-11, a different set of years than for other wines.

Outlook for the 2016 vintage

The best case scenario for any year in Bordeaux is that plentiful supplies of quality wine are produced, ready to be released into a healthy market. 2016 appears to fit the bill exactly.

Yields have broken all recent records. As producer and writer Gavin Quinney suggests in his harvest reports, 2016 is the largest Bordeaux harvest since 2006 when there was 10% more vineyard area. The region is expected to produce around 577 million litres, of which 85% is red, 10% is dry white, 4% is rose an 1% is sweet white. This equates to a staggering 770 million bottles.

Bordeaux Yields 2006-2016



Quality also looks promising. As Quinney notes, the summer months of 2016 were extremely dry. The vines eventually found refreshment when heavy rain started to fall in the middle of September, but the harvest was picked in glorious sunshine. Minimal threat of rot meant that growers were free to choose picking dates for each of their parcels.

Of course, the verdict on the vintage will only become clear once the trade and critics begin to return from Bordeaux in the coming weeks.

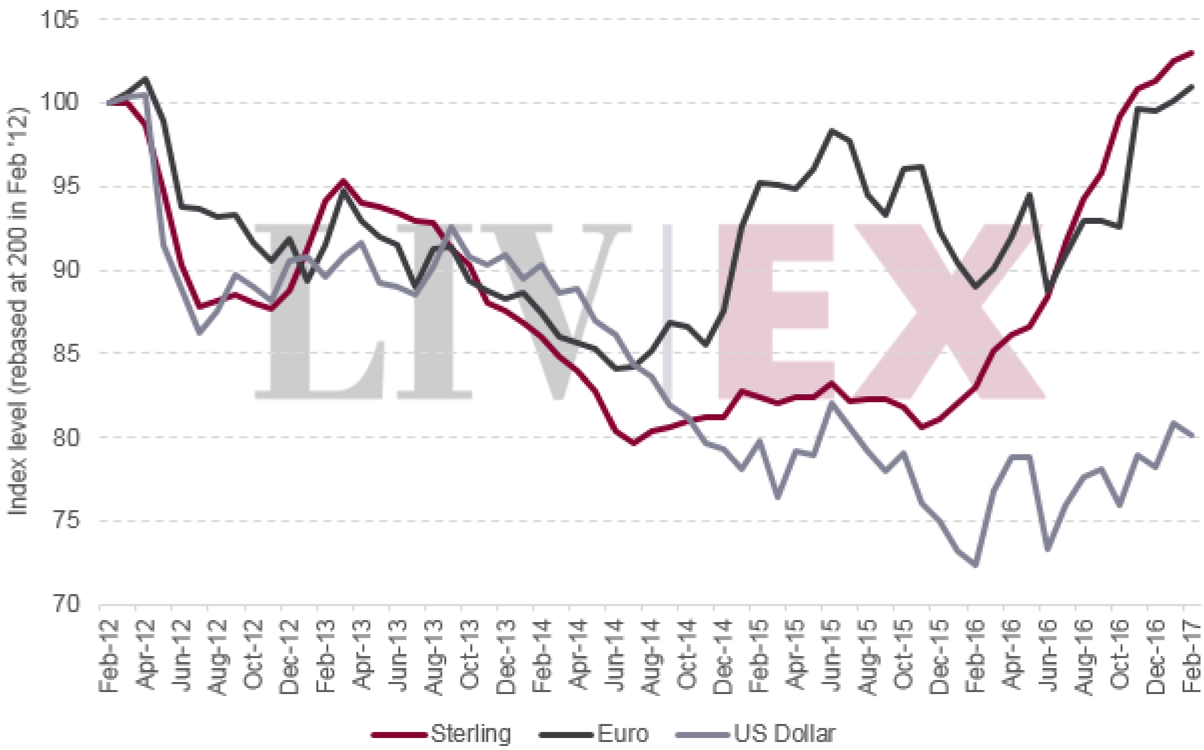
Market Outlook

The 2016s are set to be released at an interesting time for the fine wine market. After a number of disappointing years, market participants started to perceive value in Bordeaux at the end of 2015. Sentiment was supported by Sterling weakness in the run up to the UK referendum, and Brexit proved to be the trigger that pushed prices even higher.

All of the Liv-ex indices made gains in 2016. The Fine Wine 100 – the industry benchmark – has risen for an unprecedented fifteen consecutive months and outperformed a number of other global indices.

Although the fine wine market received a significant boost after the UK voted to leave the EU, this was flattered by a weaker Sterling, as the chart below shows. Returns have been less exciting in US dollar terms.

Liv-ex Fine Wine 100 Index (Sterling, Euros and Dollars)



Conversely buyers from Dollar-based markets are in a stronger position heading into the 2016 campaign. The US Dollar has strengthened by almost 10% against the Euro since last May. Equivalent releases will be around 10% more expensive for Sterling buyers this year.

These currency movements are taking place in the context of significant global political shifts. The results of the upcoming French election are likely to impact exchange rates further, adding sensitivity to the timing and prices of releases.

Bordeaux has undoubtedly been the main driver behind the broader market recovery. With early feedback suggesting that 2016 could be another high quality vintage, En Primeur may be an important factor in determining the direction of the market in 2017.

Conclusion

The En Primeur market has the opportunity to embrace a step-change in transparency and efficiency brought about by the internet. This would add considerable value to buyers and sellers, just as it has across other markets.

The secondary market is already the most efficient pricing mechanism for fine wine, particularly for wines which enjoy the greatest liquidity. Liv-ex's 'fair value' methodology harnesses the power of the secondary market to help price En Primeur.

The trade and their clients can use 'fair value' to help identify wines which offer the greatest value En Primeur and to avoid those which offer the least. In recent years, En Primeur has been mispriced relative to prices in the secondary market, sometimes by as much as 30%. Therefore the decision to buy En Primeur can have a significant impact on both margins and returns.

High expectations for the vintage, a recovery in fine wine prices and the opportunity to increase transparency and efficiency bode particularly well for En Primeur in 2016. The opportunity for a successful campaign is there – for those ready to take it.