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LONG-TERM INVESTMENT WITH DERIVATIVES

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Derivatives, like many other financial products, give the investor the ability to make long-term investments. The purpose of this factsheet is to show that by adding options to our investment in shares, the results improve considerably in the long term.

To do so, we will present the BuyWrite and PutWrite strategies, which have become very fashionable among leading managers in recent years.

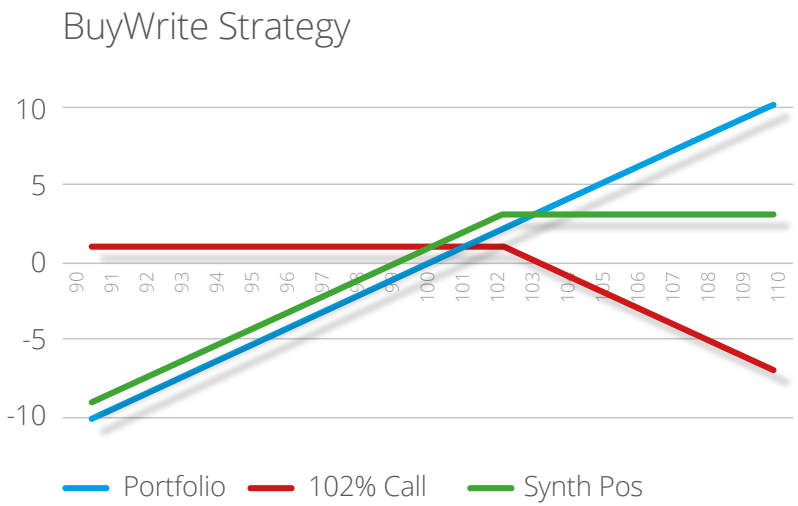
BuyWrite Strategy

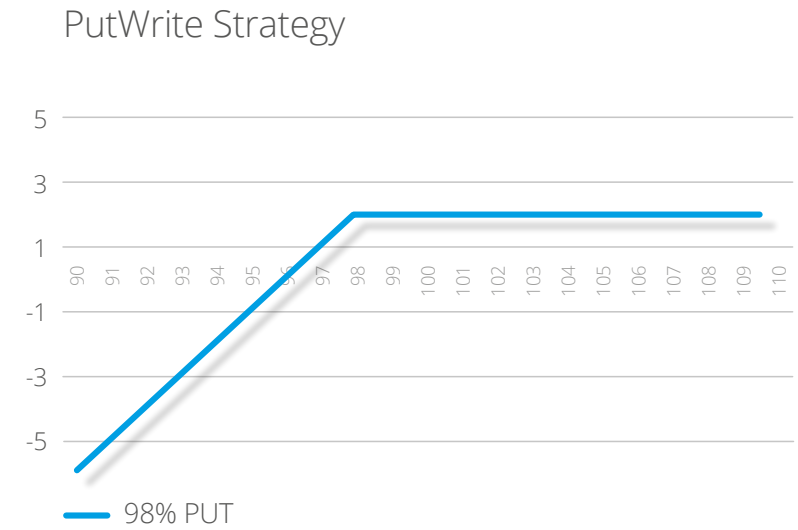
This is also known as covered call and consists of adding a near-maturity call to the stock portfolio. This is usually done with out-of-the-money calls, typically using the 102% call, i.e., 2% out-of-the- money. For example, if the price of the IBEX 35 is 10,000, choose a call with a strike price of 10,200.

PutWrite Strategy

This is also known as collateralized reverse convertible and consists of adding a short-term put to the stock portfolio. As with the previous strategy, there are several modalities, but perhaps the most widespread is to use 98% put, i.e., a strike price 2% out-of-the-money. Thus, if the price of IBEX 35 is 10,000, a strike price of 9,800 would be selected.

As we can see in the chart, it is a bullish position with limited profits and unlimited losses, very similar to the BuyWrite strategy.





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Advantages of BuyWrite and PutWrite

- Premium income is invested at the risk-free interest rate.
- The premium income cushions the first losses in the event of a drop in the underlying asset, thus resulting in systematic improvement. Thus, an income of 1.5% in premiums and an underlying asset that drops by 4% in the month create a combined position with the options, which lose only 2.5%.
- The implied volatility, which is the volatility the options are quoted with, is regularly higher than the volatility of the underlying asset itself. As we can see in the chart below, there is usually (not always) a positive difference between the two volatilities.

This difference normally occurs because, faced with the uncertainty of quoting the volatility that an asset is going to have in the next 30 days, the market makers who quote options tend to quote higher in order to hedge the risk that an increase in volatility will lead to losses. This risk is clearly understood by option buyers, who are willing to pay a little more for volatility in order to hedge.

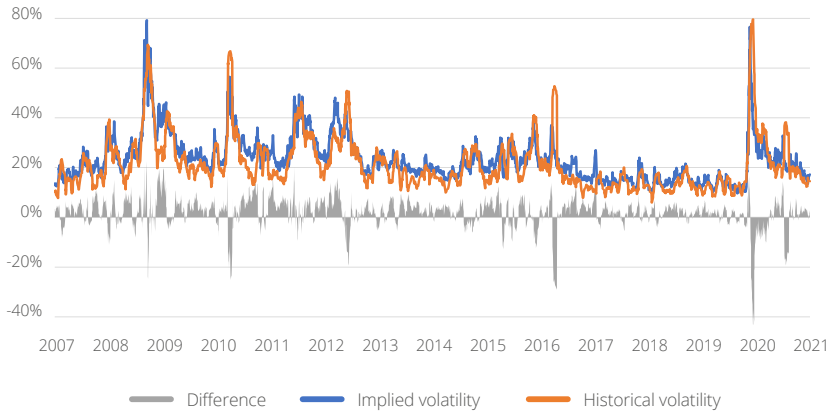
Disadvantages of BuyWrite and PutWrite

It limits the upside profit of the underlying asset to a certain monthly amount. For this reason, in very bullish markets it generates less yield than the underlying asset itself, although as we will see later, if the strategy is maintained for some time, in the overall computation the performance improvement against the underlying is clear.

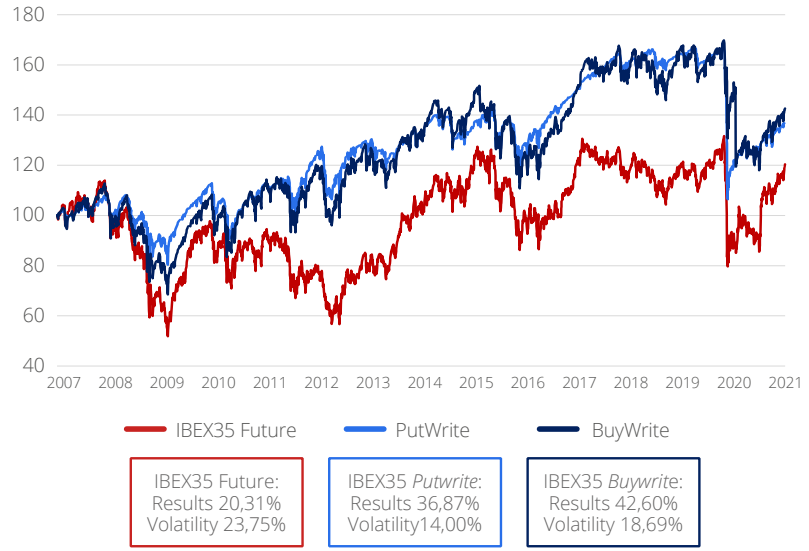
Backtesting BuyWrite and PutWrite Strategies

In the following simulations, the BuyWrite index has been built based on IBEX 35 Futures instead of using the IBEX 35® with Dividends, which for all intents and purposes is equivalent and much easier for others to replicate. They have been carried out using data from January 2007 to September 2014.

IBEX 35 Implied (30D) vs Realized (20s) Volatility



IBEX 35® Future vs IBEX 35® *Buywrite* y *Putwrite*



Year-to-year comparison of IBEX 35 Buywrite and Putwrite strategies, IBEX 35® Futures and IBEX 35® Index. Source: Compiled by Instituto BME with data from BME Market Data.

Performance	IBEX Future	IBEX Protective Mut	IBEX Buywrite	Buywrite
2007	8,80%	4,51%	6,95%	8,72%
2008	-36,50%	-23,99%	-15,10%	-23,76%
2009	38,27%	7,21%	21,75%	26,14%
2010	-14,44%	-14,66%	-2,68%	-1,07%
2011	-8,06%	-18,65%	9,95%	7,13%
2012	0,90%	-7,32%	5,24%	5,94%
2013	23,48%	17,56%	3,39%	7,24%
2014	10,33%	7,24%	0,55%	4,05%
2015	-4,27%	-7,95%	1,16%	-4,97%
2016	5,08%	-8,04%	9,46%	7,84%
2017	10,46%	-3,02%	11,95%	14,43%
2018	-11,82%	-10,77%	-2,08%	-6,91%
2019	16,43%	11,53%	2,92%	10,35%
2020	-13,97%	8,78%	-20,72%	-19,91%
2021 (May)	10,88%	5,39%	4,65%	6,95%