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Long/short pair trading strategy

Gold miners ETF/Gold micro future

Long gold miners ETF/Short gold future (hedge ratio 0.5)

	Long	Short	Action
Position Open	Initiate a long position worth $X of **Vaneck Gold Miners ETF** @ its Aug 11, 2023 close of $29.50	Simultaneously, initiate a short position worth $ X/2 of **Gold micro 10-oz Dec 23** futures contract @ its Aug 11 close of $1,946 (hedge ratio 0.5)	Invested capital (including margin) would be around 10% higher than X (1.1X)
Outcome 1: If long gold miners ETF position makes money after a few months			
Position Close	Close the long position in the ETF successfully if target Y is reached	Cover the short position in gold contract simultaneously booking a smaller loss than gain in the ETF	Expect a net profit of around 13% on the invested capital in less than 6 months
Outcome 2: If short gold futures position makes money after a few months			
	Average the holding in the ETF by investing $ X at target Y'. (Y'<29.5). Your units in ETF will more than double than their initial count and average price will be closer to Y' than 29.5	Cover the short position in gold contract at target W booking a gain of around . The strategy is now long only.	Expect a net profit of around 8% on the invested capital
Position close	Close the long position at original target Y or lower thereby increasing your gain due to capital being 2X.		Expect a net profit of 20% on the invested capital in around a year.

Strategy rationale and risk factors

- If a trader has a bullish view on gold miners ETF in the short-term but wants to lower risk of a decline in gold price, then a long/short pair trade can be a better strategy

- As gold miner ETF and gold future have a strong positive correlation, they tend to move together most of the time. However, as the gold miner's ETF has a much higher std dev (volatility) than physical gold as seen in table 1, the percentage change in ETF will be much higher for a 1% change in gold future.

- **To improve potential gain, a hedge ratio of 0.5 can be appropriate but this has a higher risk than a perfect hedge of 1.0**. A hedge ratio of 1.0 also makes money if the ETF moves higher but generates a lower return than for a 0.5 hedge ratio

- The trader should be willing to average ETF position in case of a significant drop in its price which means adding an equal amount of capital to increase his units and lower the average cost. **This is very important in case of an adverse outcome and is part of your strategy to become successful over time.**

- When the long ETF position is averaged at a lower level, the short position is simultaneously closed yielding a smaller profit. The margin on futures contract gets released and can be used to partly fund the purchase of ETF for the second time.

Parameter	Vaneck Gold miners ETF	Physical gold
Historical standard deviation	31.5%	14.7%
Beta	0.68	0.12
R-squared	14	1.9
Dividend yield	1.5%	0%
Correlation with physical gold	0.94	1.0