The SPX Index is not tradable

It is not a total return index

As a result the futures price of the SPX Index may be less than the index value despite the positivity of interest rates. This is because someone who invested in the index in order to guarantee delivery would also make some money off the dividends. So futures price is e^(r-d)T\*(current value).

You could trade in ETF options such as SPY US Equity. However, options are then American. Note that SPY US Equity is a dividend paying company. The number of shares held and the dividend paid are adjusted to ensure SPY US Equity has the correct value. SPY charges a management fee which is taken out of the dividend.