EDITORIAL

MARKET TIMING, THE ZERO LOWER BOUND AND QE

Successful market timing between equities and cash requires high skill levels. Very low official interest rates, through their impact on market rates, create a disincentive for doing market timing because they increase the break-even skill level. The same applies for quantitative easing. These considerations are important from a financial stability perspective. Growing investor reluctance to do market timing will probably lead to a decline in equity market volatility and an increase in equity valuations. The former provides a false sense of safety whereas the latter increases the sensitivity to negative news and hence increases the riskiness.

Market timing, i.e. the decision to actively[1] switch between risky investments such as equities and cash, is both appealing – considering the return differences between the two asset classes – and scary, in view of the loss or opportunity cost if the wrong choice has been made.

The likely gains of market timing have been analysed in an article published in 1975 by William Sharpe[2], who in 1990 shared the Nobel Memorial Prize in Economic Science with Harry M. Markowitz and Merton H. Miller *"for their pioneering work in the theory of financial economics"*[3]. Although certain parameter values, such as the level of interest rates, need to be updated, the methodology and insights are more than ever relevant. Consider an investor who at the start of each year has to decide on his asset allocation for the remainder of the year. Based on historical experience, there is a certain probability of stock markets delivering a positive (negative) return. In a two-asset world, the investor goes either for equities or, if he expects markets to go down, for cash. The realised performance will of course depend on whether the decision at the start of the year was the correct one.

Starting the year with a bullish (bearish) view ends up being painful when the market delivers a negative (positive) performance that causes a(n) loss (opportunity cost). A high-skilled investor has of course a higher chance of making the right call. Sharpe calculated how much skill is required to do better than a naïve strategy of investing each year in the same mix of equities and cash[4]. The result – i.e. the break-even skill level – depends on the average return difference between equities and cash when the former are up or down and the historical frequency of up and down markets in equities. The outcome of Sharpe's calculations was sobering: about 75% of annual decisions need to be right – being in equities (cash) when the market is up (down) – to do equally well as a passive strategy of no market timing at all.

Within this framework, how do a policy rate at the zero lower bound – or even negative, such as in the euro area – and quantitative easing influence the decision of the investor of doing market timing or not? For a given expected return of equities, low interest rates create a disincentive to do market timing because the performance difference increases. If cash yields a zero return, one needs a higher conviction level to go for this asset class rather than for equities, compared to a situation where interest rates are high. This implies that the required skill level increases when interest rates decline (chart 1):

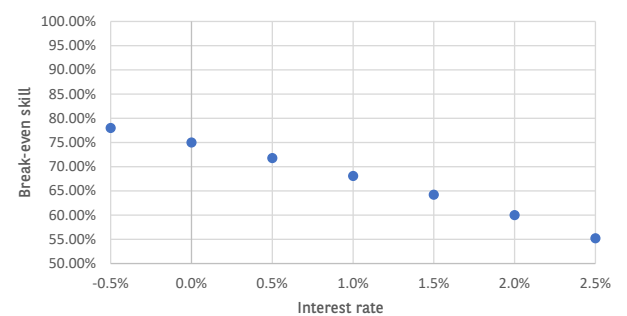### MARKET TIMING, BREAK-EVEN SKILL LEVEL AND INTEREST RATES

CHART 1

SOURCE: BNP PARIBAS

very accommodative monetary policy make it riskier for investors to do market timing. An investor may also refrain from timing the market because he expects that the central bank's policy stance will foster corporate profit growth. Quantitative easing is another factor. When investors sell their bonds to the central bank, part of the proceeds may be invested in equities, which motivates equity investors to hold on to their positions. The reluctance to time the equity market increases further if investors choose between equities and bonds – rather than cash – because of the correlation between the two. For many years already, equity and bond markets have seen predominantly a negative correlation, which gives rise to the following issue: should the decision to switch from equities to bonds turn out to be the wrong one – because the stock market unexpectedly had a positive year-, the fact of having moved to bonds may be twice painful: because of the opportunity cost of not being in equities and due to the poor or even negative performance of bonds if the traditional negative correlation with equities prevails

These considerations are relevant from a financial stability perspective. The policy rate at the zero lower bound and QE create a reluctance for investors to do market timing. This will probably lead to a decline in equity market volatility and an increase in equity valuations. The former provides a false sense of safety whereas the latter increases the sensitivity to negative news and hence increases the riskiness.

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1. 'Actively' means a decision based on certain signals, which influence the expected returns. It should be distinguished from re-balancing of the equity and cash weights. A re-balancing strategy corrects for the drift in the asset class weights due to performance differences between the asset classes. It seeks to bring the portfolio allocation back in line with the target risk profile.
2. William Sharpe, *The likely gains of market timing*, Financial Analyst Journal, 1975.
3. https://www.nobelprize.org/prizes/economic-sciences/1990/summary/.
4. The weights in Sharpe's simulation were chosen in such a way that the passive asset allocation had the same risk as the market timing strategy.

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