CURRENT RISK PROFILES DON'T CAPTURE THE EFFECT OF COVID-19 ON INVESTOR RISK APPETITE

By Emily Allen

The use of questionnaires in creating risk profiles is considered best-practice and complies with regulatory framework. But is an investor's risk profile accurately captured by a questionnaire? Different behavioral biases, experienced by investors in response to an event which lies outside their expectations, are demonstrated using the Covid-19 pandemic and provide an explanation as to why questionnaires alone do not result in a complete risk profile.

BACKGROUND

Dutch investment advisory and asset management firms are required to determine a risk profile for every client – a procedure which is set out by the AFM. The AFM provides some best-practice questions that comply with the regulatory framework defined in the Markets in Financial Instruments Directive (MiFID). However, the finalized questionnaire provided to clients is largely up to the interpretation of each individual firm.

Photo: Archive Emily Allen

Emily Allen

In classical finance theory, all investors make decisions based on rational expectations. Risks to the market are assumed to occur at a normally distributed frequency, meaning investors can correctly evaluate the risks of both current and future events when they form their risk tolerance beliefs. This understanding of risk tolerance implies that a client's risk profile should not differ in response to current market fluctuations – as the risks associated with these macroeconomic conditions are known and already included in their tolerance level.

ANALYSIS

The coronavirus crisis presents an opportunity to explore how behavioral biases interfere with client's expectations and alter their risk profile. An experiment was conducted with a Dutch asset management firm using a sample of their clients who responded to the risk profiling questionnaire, once before and once during the Covid-19 pandemic.

The questionnaire that was used for the experiment was consistent with regulation and was organized into two sections which make up a risk profile: 'Risk Capacity' and 'Risk Appetite'.[1] 'Risk Capacity' measures how much financial risk the investor is able to carry, while their 'Risk Appetite' is based on how much financial risk they are willing to carry. The 'Risk Capacity' section included investor characteristic questions about wealth and income, but also questions regarding gender, employment status and financial knowledge.

The 'Risk Appetite' section included questions which directly address risk tolerance, such as participating in a hypothetical gamble and being asked to self-evaluate their level of tolerance as a number – a higher number indicating a

higher tolerance. The 12 questions in this section of the questionnaire were each used as proxy measures for risk tolerance in a regression model.[2]
A selection of the investor characteristic questions were used as controls and a time dummy[3] was included to indicate the effect of Covid-19. Two more control variables, 'market volatility' and 'market direction', were added to the model to see if they could further explain why the coronavirus crisis might affect risk appetite.[4]

The coronavirus crisis presents an opportunity to explore how behavioral biases interfere with client's expectations and alter their risk profile.

BEHAVIORAL BIASES

The results of the analysis demonstrate that for 10[5] out of 12 questions, an external shock to the market, such as the outbreak of Covid-19, lies outside of investor expectations and decreases their risk appetite. So, if the behavior of clients cannot be explained under the assumption of rational expectations, is there an underlying determinant of how they make investment decisions?

The field of behavioral finance allows for many biases associated with investors incorrectly forming their beliefs and can be categorized into two arguments: 'Cognitive biases' and 'Emotional biases'. Cognitive biases, or how people think, include information processing errors such as 'Framing' or 'Projection Bias'. These types of biases can be managed if an advisor is aware of them and educates the investor. Emotional biases are driven by how people feel, and an advisor may have to accept that it is more difficult to change the way a client feels. 'Loss Aversion' and 'Overconfidence' are examples of how emotions can overpower during times of stress.

These biases offer an explanation as to why clients experienced a decrease in risk appetite during the Covid-19 pandemic. In particular, Projection Bias, which involves projecting current events into the future, can account for this decrease in risk appetite, as clients are not thinking rationally about the nature of a market cycle. Furthermore, clients may be experiencing Loss Aversion, in that during market decline they begin to evaluate losses as twice as bad, compared to gains. This in turn influences the formation of their beliefs on risk.

There are two questions[6] to which the responses indicate a higher risk appetite for some clients during COVID-19. Both of these questions refer to the client evaluating their own risk tolerance and it is possible that they do not actually understand their own appetite. Emotional biases, such as Overconfidence, offer a further explanation as to why clients feel their own risk appetite is higher during a crisis.

RECOMMENDATIONS

There is no doubt that a risk profiling questionnaire lays the foundation for advisor-client relations and that it is a quick solution to covering questions such as those included in the 'Risk Capacity' section. However, they should be used with caution as the results indicate that the different styles of questions in the 'Risk Appetite' could produce conflicting risk profiles.[7]
A questionnaire might comply with regulation, but it does not complete the risk profiling process and most likely only represents half of the solution for suitable asset allocation.

Further investigation into the individual behavior of clients is necessary. This could be done through a personality test or through online-gaming software that has recently become available to many companies to elicit individual's behavioral traits during the hiring process. There is no reason to discard these as a resource for new clients. This extra measure could result in the construction of a portfolio which is better suited to the client, resulting in a more satisfied client. Understanding a client's behavior would also indicate how to effectively communicate with them. Some clients might respond better to direct language and some clients may just require more communication.

Nevertheless, to prevent a loss of relationship between advisor and client, educating both parties on behavioral biases would help the advisor to recognize situations when they emerge and would challenge the client to understand how basic psychological concepts get in the way of making rational investment decisions – or worse, get in the way of satisfaction with their investments. «

1 Next, financial goals are taken into account, to see whether they are attainable with regard to the capacity and appetite.
2 Specifically an ordered probit model. This is a type of regression which allows risk tolerance to be analysed as a range from 1-5 (with 5 being the most risk tolerant) – which is the way questions in the 'Risk Appetite' section of the questionnaire are answered.
3 Indicating whether the questionnaire was from before or during COVID-19.
4 The complete model for the regression analysis included nine control variables: COVID-19, Age, Age², Gender, Employment Status, Wealth, Income, Volatility Index and Equity-only Put/Call Ratio.
5 Seven of these questions have significant COVID-19 related variables; three at the 1% significance level, one at the 5% significance level and three at the 10% significance level.
6 Question 35: Have previous financial crises influenced your investor behavior?; Question 37: Self- evaluate your risk tolerance score (0-100).
7 Hypothetical scenario questions recorded a decrease in risk tolerance whereas self-evaluation questions reported an increase in risk tolerance.

Reference:
Allen, E. (2020). The Effect of a Risk Tail Event on Investor Risk Tolerance. Utrecht University School of Economics Master Thesis. Thesis written during an internship at the Aureus Group.

Link to thesis https://www.financialinvestigator.nl/nl/nieuws-detailpagina/2020/08/24/Current-Risk-Profiles-Dont-Capture-the-Effect-of-COVID-19-on-Investor-Risk-Appetite

This article was written by Emily Allen, MSc graduate, Utrecht University.