

[DOI: 10.20472/IAC.2016.024.084](https://doi.org/10.20472/IAC.2016.024.084)

IAN SMITH

Manchester Metropolitan University, United Kingdom

A STUDY INTO UK FINANCIAL PLANNERS OPINIONS ON RISK TOLERANCE AND RISK PERCEPTION.

Abstract:

Risk tolerance needs to be assessed before financial planners provide advice on the suitability of investments. Previous studies have questioned whether investors risk tolerance remains stable over time or whether investor's perception of the risk attached to investments is the factor that varies.

This study reviews the methods currently employed by UK Financial Planners following the guidance the UK Regulator published in 2011. The study was based on both online and paper based questionnaires completed by Financial Planners and explores the method used and the planner's views on the stability of their clients risk tolerance and perceptions of risk over time.

56 sets of questionnaires were obtained and the data analysed using SPSS v21. The results showed that two proprietary psychometric based tests were most popular along with planners own in-house systems. The responses of the planners supported the theory that risk profile is a stable personality trait for most people and that their clients perceptions of risk are less stable.

Keywords:

Risk tolerance, risk profile, Financial planning, financial advice, personal investment, risk perception

JEL Classification: D14, G11, D81

Background

For financial planners and wealth managers to construct suitable investment portfolios for individual clients they need to assess the level of investment risk tolerance the client is willing to take. The risk tolerance level is then combined with factors such as the investor's goals, time horizon and other financial circumstances to create an appropriate investment portfolio or model. Financial risk tolerance reflects an investor's attitude to investment risk when making a decision, such as initially making an investment or deciding whether to continue to invest (Hanna et al, (2008); Injodey & Alex, (2011); Gerrans et al., (2012)). For some years various third party providers have produced questionnaires, usually now in electronic format, designed to assist planner by determining risk tolerance (Droms & Strauss, (2003), Hallahan et al., (2004), Yook & Everett (2003)).

A number of automated online systems are promoted to UK Financial Planners offering to assess an individuals risk tolerance and in many cases create a suitable asset allocation and portfolio. There are also specific funds being promoted that are tailored to fit to the risk scores of popular profiling tools usually based upon volatility measures. Independent research group Defaqto stated this type of fund has seen more product launches than any other since January 2013, Potaczek, (2015). In 2011 the UK regulator at the time the Financial Services Authority (FSA) published finalised guidance on how they expected this part of the advice process to be conducted, based on research they had carried out on the methods and systems in use at the time in the UK (FSA, 2011). The report levelled criticism at both the methods adopted by some advisers and at the proprietary tools themselves. Of particular concern to the FSA was the lack of attention to risk capacity and the potential for individuals with a high-risk tolerance to be recommended higher risk funds that might be inappropriate, as they do not have capacity to withstand the potential losses.

Risk tolerance stability

If the risk tolerance can be measured at a point in time, planners would also need to take account of whether this measures a stable trait or a transitory state. There is evidence that risk tolerance does remain stable. For example, in the paper Roszkowski & Davey, (2010) which investigated whether risk tolerance was a stable characteristic for most people against the background of the 2008 financial crisis. The authors sought to ascertain whether the major downside market volatility experienced during the period affected individuals levels of risk tolerance.

The authors of the paper define risk tolerance as the amount of risk an investor would take to achieve their goals. This being different to risk perception where individuals give their own perspective on how risky they believe a particular investment or type of investment would be. In Faff et al, (2008) the authors agree that there are differences between risk tolerance and risk perception but they concluded that in most individuals the measures were closely aligned.

The Roszkowski & Davey research was based on data from risk tolerance profiles completed using the Finametrica system, an Australian computerised risk profiling system founded by one of the authors Geoff Davey, which is now available in twelve countries including the USA and UK. They studied data from 2586 individuals who completed a profiling exercise before the 2008 crash and then completed a second

profile between August 2008 and June 2009. Only 6.3% retained exactly the same risk score out of 100, on average the respondents who increased their risk profile did so by 5.95% and those who reduced their profile did so by 7.26%. 37.4% of the respondents did increase their risk tolerance score despite the financial crisis and negative media. The relatively small magnitude of change in risk score was given as evidence of the stability of risk tolerance.

The writers did point out that risk perception may, however have changed to a greater extent with individuals feeling that equities were more risky after the crisis than before. They referred to some Australian studies that appeared to demonstrate this effect. The role of perception in risk is discussed in the Roszkowski & Davey paper and concludes it can be viewed as highly subjective. They suggest difference in perception of risk between different ethnic groups or between males and females may be the driver of the differences in risk tolerance results observed. The lack of any major change in risk tolerance during the global financial crisis was also supported by the research in Gerrans et al, (2012).

Roszkowski & Davey concluded that the risk tolerance scores were relatively stable and the changes particularly those who showed large decreases were due to life events, although they also coded the financial crisis as a negative life event. They did not however make any comment on the 37.4% who increased their risk profile despite the crisis. Neither did the researchers make any comment on the effect that access to the profiling system is normally limited to clients of financial planners and having access to a financial planner may also affect risk tolerance.

In Van de Venter et al., (2012) a longitudinal study was carried out based on the individual risk tolerance scores of respondents to an annual survey in an Australian financial magazine over several years. An analysis was then conducted on any changes to the scores recorded over different annual surveys. The results, which were also generated via the Finametrica system, were very stable with a mean change over 1 year of 0.29 points on the systems 100-point scale. The study also attempted to identify factors that led to a change in risk score and identified a number of demographic factors.

Other writers express the view that risk attitude is not immutable but is affected not only by changes in circumstance but also by short term experience, Cordell, (2001) or short term economic data, Grable, (2013). In Holton (2011), survey results from the American Investment Company Institute survey across 4019 randomly selected American investors in mutual funds show that for most age groups their attitude to risk remained at the time of the analysis below its pre 2008 credit crunch level. This may indicate that risk tolerance has reduced rather than remained stable. Although Roszakowski & Davey argue that risk, tolerance has remained stable but it is the individual's perception of how risky investments are, that has changed.

Objectives and Methodology

The objectives of this study has been to investigate how UK Financial planners are currently measuring the risk tolerance of their clients, given the high level of focus this area had received from the UK regulator. There has been speculation that the regulatory attention led to an increase in uptake of psychometrically based tools. In June 2011 it was reported that the provider Distribution Technology signed up one thousand new firms in the first quarter, Roberts, (2011). The study will also seek to

discover the views of the planners on the reliability of the approach they were using and their opinions on the stability of their clients' attitudes to both risk tolerance and risk perception. The opinions of the planners were then reviewed with reference to the relevant literature discussed previously.

Specifically the areas explored were:

To identify what systems UK financial planners are using to assess the risk profile of their clients currently.

To ascertain the planner's level of confidence in the system they use.

To identify if the planners are using the same system to also produce an asset allocation model for their client and if so, their confidence in the applicability of the model.

Finally two questions were asked on the planner's opinions on whether they believed that their client's attitude to risk was stable over time and whether their client's perception of the risk applying to investments was stable over time.

Research was carried out by use of a questionnaire both online and as a paper version, see appendix, which were distributed as follows:

The online survey was placed as a link on a website forum page used by Independent Financial Advisers.

The paper based questionnaire was distributed at two conferences for financial planners one organised by the Chartered Institute of Securities & Investment the other by New Model Adviser magazine.

The questionnaire was tested with a small number of respondents before it was more widely disseminated. The survey was anonymous and did not collect any personal or demographic data but concentrated on adviser's choice of system and opinions. As the study was voluntary, for academic purposes only and anonymous the ethical concerns for the study were low.

Fifty-six usable responses were received and were then coded into SPSS v22.

Coding

The adviser's responses were numerically coded with nominal values being given to various risk profiling systems. To collect data on planner's attitudes Likert scale questions were used based on a five point ordinal scale. A five-point scale provides a reasonable degree of accuracy and was the scale originally used by Likert, Boon & Boon, (2012), these were coded as follows:

For the question "How confident are you in the results of this method"?

Not confident at all	1
Not very confident	2
A little confident	3
Fairly confident	4
Very confident	5

There was a yes/no question on whether planners used the Asset allocation derived straight from the risk profile system, which was coded 1 – Yes, 2 – No. This led to a question for those answering yes on the planner’s view of the suitability of the allocation coded as follows:

Rarely	1
Sometimes	2
Often	3
Nearly Always	4
Always	5

For the two questions on risk and risk perception stability the coding was as follows:

Strongly disagree	1
Disagree	2
Neither agree nor disagree	3
Agree	4
Strongly Agree	5

Analysis

From the 56 questionnaires 9 different risk assessment tools were indicated.

The results of the research show that three methods dominate the chosen risk tolerance assessment for surveyed Financial planners.

Finametrica and Distribution Technology that both offer psychometric based risk profiling are the most popular proprietary systems used. The other popular option remains planners using their own in-house systems.

Risk profile system used

DT	Finametrica	Evalua	Morningstar	Moody's	Provider	In house	Other
9	22	2	3	0	1	17	2

Given the low numbers for systems other than Distribution Technology (DT), Finametrica and in house for later analysis all the remaining systems were collapsed to a single variable “other” giving the following:

Risk profile system used reduced version “Redsys”

DT	Finametrica	In house	Other
9	22	17	8

The next question asked Planners to indicate the level of confidence they have in the system or tool that they currently use.

The confidence planners have in the various systems is generally high.

The results show a reasonable degree of homogeneity with only one outlier being identified and giving a negative response.

Many of the systems link the risk profile derived to an appropriate asset allocation for client's investments. A majority of users, 36 out of the 56 respondents are utilising the combined results.

For those planners that use the asset allocation tool within the systems there is a high degree of confidence in the output. From the study 80% of planners, using the system produced asset allocations thought the results were always or nearly always suitable for their clients.

If the system asset allocation is used, is it suitable for client?

Rarely	Sometimes	Often	Nearly always	Always
0	2	5	18	10

The final two questions elicited planners opinions as to whether they thought their clients risk profile remained stable over time and whether they believed clients perception of risk is stable. These questions link back to the relevant literature on this area to establish if this accords with the experience of planners.

Is risk tolerance stable over time?

Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
0	4	10	34	8

Seventy five percent of respondents either agreed or strongly agreed with the statement that their clients risk tolerance was a stable trait.

The second question on risk perception had a more mixed response.

Is client's perception of the risk of different investments stable over time?

Strongly disagree	disagree	neither	Agree	Strongly agree
2	17	12	25	0

If we classify the neutral response as not supporting the statement then a majority of planners believed that the perception of risk is not stable.

Although the literature supports the view that the perception of risk and risk tolerance are not the same, some writers suggest they are very similar, for example Faff et al, (2008). A test was therefore carried out to determine if there was a relationship between the planners views on whether their clients risk profile tolerance and risk perceptions are stable. The Cronbach alpha coefficient between the two factors was 0.383 indicating there is low internal consistency between the two measures. This supports the view that the measures of tolerance and perception are different in the view of the planners surveyed.

As part of the research question it was necessary to search for any relationships between the systems used to analyse their clients risk profile and then the planner's opinion on the stability of risk tolerance or risk perception.

The data was mostly non-parametric in nature given planners generally held positive view on the systems they used. Consideration was given to transformation but given the small data set it was decided to proceed using analysis suitable for non-parametric data.

Both a Kendall Tau and a Chi-square test were used to investigate if there was a relationship between the risk profile system used by planners and their opinions on the stability of their clients risk profile or perception of risk. These measures are suitable for analysis of potential associations when the data contains Likert-type data, Boone & Boone, (2012).

As the sample size was small and therefore cell counts would be below five in many cases a further transformation of the data was carried out. The Likert-type data on the opinions of planners on risk tolerance stability and risk perception stability was recoded to two new variables:

Reduced risk tolerance stability (Red_Risk)

1 – Undecided or disagree

2 – Agree

Reduced risk perception stability (Red_Perc)

1 – Undecided or disagree

2 – Agree

When using five Likert-type items it is appropriate to assign three items to an undecided position and two to the affirmative, (Munshi, (2014)).

Risk tolerance stability

On the relationship between risk profile system and planners, opinion of risk stability there was no significant relationship were identified.

A Chi-square test for independence (Cramers V) indicated no significant association between Planners chosen risk profiling system and their opinions on their clients risk tolerance stability, $X^2 (3, n = 56) = 0.34, p = 0.085$.

A Kendalls Tau-b correlation test was also run to determine if there is a relationship between Planners chosen risk profiling system and their opinions on their clients risk. This showed no statistically significant relationship between the two ($T_b = -1.708, p = 0.088$).

Risk perception stability

On the relationship between risk profile system and planners, opinion of the stability of their client's perception of risk there was also no significant relationship identified.

A Chi-square test for independence (Cramers V) indicated no significant association between Planners chosen risk profiling system and their opinions on their clients risk tolerance stability, $X^2 (3, n = 56) = 0.117, p = 0.858$.

A Kendall's Tau-b correlation test was also run to determine if there is a relationship between Planners chosen risk profiling system and their opinions on their clients risk. This showed no statistically significant relationship between the two ($T_b = -0.066$, $p = 0.596$).

Potential problems

The most likely problem with the study is that the data set is relatively small. A review of the trade publications for UK Financial sector did not indicate the study results were at odds with current market trends but it would be appropriate to investigate the area further using a larger scale study.

The participants were self-selected this may have introduced a bias with those that held stronger opinions being more likely to complete the questionnaire.

The questionnaires were made available via different sources both online and paper-based and it thought to be a representative sample of UK based planners but as the survey collected no demographic details it is unable to determine any biases within the sample.

Discussion

Whilst accepting the study is relatively small, it provides an indication of planner's use of risk profiling systems in the UK after the intervention of the regulator in 2011.

Out of the proprietary systems there appears to be a clear dominance by two systems both based on psychometric questions. The psychometric approach has been shown to equate well with individual intrinsic risk attitudes and choices in risk taking tests like lottery games, Pennings & Smidts, (2000). There is, however, also a surprisingly high proportion of planners that are using their own in-house systems. Whilst the Financial Services Authority (FSA) in their report - FSA, (2011) did not prohibit this approach and has subsequently made clear that a personalised approach can be very effective, it is still surprising that the in-house approach was the second most popular choice. The original FSA report was critical of any approach that was not systematic and identified poor practices in firms having unclear questions and/or unclear risk descriptions.

Financial Planners demonstrate a high degree of confidence in the systems they have adopted. In the comparison of results of different questionnaires in Yook & Everett, (2003) the lack of correlation between the six systems tested was highlighted and concerns raised over the validity of the questionnaire approach. Such a study might suggest planners should be less confident in the systems. Subsequent authors have however pointed out the questionnaires in the Yook & Everett, were not psychometrically based, which might explain their inaccuracy.

There is potentially a level of confirmation bias that might lead planners to over-estimate the accuracy of the systems they use (Nickerson, 1998). Familiarity with systems and their ease of use has also been shown to be major factors in enhancing trust Corritore et al., (2003).

Financial Planner's ability to gauge the risk tolerance of clients was tested in Roszkowski et al., (2005), and planner's subjective assessments were found to be

poor. In Callan & Johnson, (2002) similar doubts over planner's abilities were raised and the writers pointed to a high degree of overconfidence planners exhibited in the ability to judge risk.

Conclusion

The study indicates a high proportion of planners are assessing risk tolerance using their own in house systems. Further investigation on the construction of these systems would be useful to determine whether these systems are robust and equivalent to or better than the proprietary alternatives. As discussed, in Roszkowski et al., (2005) risk tolerance questionnaires can fail on the grounds of validity or reliability. The system would need to have had its validity tested to ensure it is measuring the risk tolerance associated with investment decisions. The system must also have been tested for consistency to ensure the results are reliable. For the popular proprietary systems, psychometrics has been used to ensure these requirements have been met. For the planners own systems it is unclear how they have been tested and further study of this area may be called for.

A majority of the respondents are using an asset allocation derived from the system. The basis typically used by the risk profiling systems to construct asset allocations uses mean variance optimisation. Mean variance optimisation is based on the Modern Portfolio Theory (MPT) outlined in Markowitz, (1952). There is considerable literature on portfolio construction, some empirical studies are critical of mean variance optimisation (De Miguel et al., (2009), Jacobs et al., (2014)). Given that MPT is based on utility theory and expects investors to always act rationally in balancing risk and return, the use of such portfolio construction technique linked to psychometric risk tests that are behavioural in nature may also be questioned. The equating of risk with volatility/variance is also an area where doubts have been raised for example in Duxbury & Summers, (2004).

Whilst the UK regulator states it does not seek to impose how planners should work, they were clear that planners should be able to show they understand and can justify the background to the systems they use. The majority of planners using these systems in the study felt that the systems they used produced suitable results. Further study on planners and investors understanding on how the asset allocation is constructed and related to risk would be useful.

Financial planners who responded generally hold that their client risk tolerance is stable over time. Some of the literature on this area Van der Venter et al, (2012), Roszkowski & Davey, (2010), Smith, (2015), support this. There are however, alternative literature that suggests risk tolerance is affected short term experience (Cordell, 2001) or short term economic data (Grable, 2013). The alternative view presented in Roszkowski & Davey, (2010) was that the risk tolerance of the client was stable but their perceptions of the risk of investments was affected by short-term factors. This study supports this hypothesis by demonstrating that UK Financial planners also believe that risk tolerance is stable but that the risk perceptions of their clients is much less stable.

References

- Boone, H.N. and Boone, D.A., 2012. Analyzing Likert data. *Journal of extension*, 50(2), pp.1-5.
- Callan, V. J., & Johnson, M. (2002). Some guidelines for financial planners in measuring and advising clients about their levels of risk tolerance. *Journal of Personal Finance*, 1(1), 31-44.
- Cordell D, (2001). Riskpack: How to evaluate risk tolerance. *Journal of Financial Planning* June 2001 p 36-40.
- Corritore, C. L., Kracher, B., & Wiedenbeck, S. (2003). On-line trust: concepts, evolving themes, a model. *International Journal of Human-Computer Studies*, 58(6), 737-758.
- De Miguel V, Garlappi L & Uppal R (2009). Optimal versus naïve diversification: How inefficient is the 1/N portfolio strategy. *Review of Financial Studies* 22.5 (2009): p1915-1953.
- Droms W & Strauss S (2003). Assessing risk tolerance for asset allocation. *Journal of Financial Planning*, 16(3), p72-77.
- Duxbury D & Summers B (2004). Financial Risk perception: Are individuals variance averse or loss averse? *Economic letters* Vol 84 p 21 – 28.
- Faff, R., Mulino, D. and Chai, D., 2008. On the linkage between financial risk tolerance and risk aversion. *Journal of financial research*, 31(1), pp.1-23.
- FSA (2011). Assessing suitability: Establishing the risk a customer is willing and able to take and making a suitable investment selection. www.fsa.gov.uk/pubs/guidance/gc11_01.pdf downloaded 1 Nov 2014.
- Gerrans P, Faff R, & Harnett N (2012). Individual risk tolerance and the global financial crisis. Downloaded from <http://ssrn.com/abstract=1990811> downloaded 16/10/2013.
- Grable, J.E., 2013. Is Risk Tolerance Stable? The Role of Projection Bias. *Journal of Financial Service Professionals*, 67(1).
- Hanna S, Waller W & Finke M (2008). The concept of risk tolerance in personal financial planning, *Journal of Personal finance* vol 7(1) p 96-108.
- Holton L (2011). Breaking Through: The State of the Risk Tolerance Conversation. *Journal of Financial Planning* [1040-3981] Holton, Lisa yr:2011 vol:24 4 p 20- 26.
- Injodey J & Alex D. (2011). Risk Tolerance of Investors: Developing a Psychometric Tool. *Research Journal of Finance and Accounting*, 2(2), p 57-73.
- Jacobs H, Müller S & Weber M. (2014). How should individual investors diversify? An empirical evaluation of alternative asset allocation policies'. *Journal of Financial Markets* Vol 19 p 62 – 85.
- Markowitz, H., 1952. Portfolio selection. *The journal of finance*, 7(1), pp.77-91.
- Munshi, J. (2014). A method for constructing Likert scales. Available at SSRN 2419366. Downloaded from https://www.researchgate.net/profile/Jamal_Munshi/publication/261252700_A_METHOD_FOR_CONSTRUCTING_LIKERT_SCALES/links/0f317533ba4066781d000000.pdf on 24/01/2016.
- Nickerson, R.S., 1998. Confirmation bias: A ubiquitous phenomenon in many guises. *Review of general psychology*, 2(2), p.175.
- Pennings, J.M. and Smidts, A., 2000. Assessing the construct validity of risk attitude. *Management Science*, 46(10), pp.1337-1348.
- Potaczek, F. (2015). Risk Targeted funds – what are they? Defaqto Information sheet downloaded from <http://www.defaqto.com/advisers/zones/multi-asset-funds-zone/features/risk-targeted-funds-what-are-they/> 30/03/2015.
- Roberts, W (2011). FSA Paper boosts uptake of risk profiler software. *Professional Adviser* 07/06/2011. Downloaded from <http://www.professionaladviser.com/ifaonline/news/2076498/fsa-paper-boosts-ifa-uptake-risk-profiler-software.12/02/2016>.

- Roszkowski M & Davey G (2010). Risk perception and risk tolerance changes attributable to the 2008 Economic crisis: A subtle but critical difference, *Journal of Financial Services professionals* July 2010, p42-53.
- Roszkowski, M.J., Davey, G. and Grable, J.E., 2005. Insights from Psychology and Psychometrics on Measuring Risk Tolerance. *Journal of Financial Planning*, 18(4).
- Smith I (2015). Is investment risk profiling affected by mood? *Journal of International Business and Economics* Vol 15, Issue 2, p 123-144.
- Van de Venter, G., Michayluk, D., & Davey, G. (2012). A longitudinal study of financial risk tolerance. *Journal of Economic Psychology*, 33(4), 794-800.
- Yook K, & Everett R. (2003). Assessing risk tolerance: Questioning the questionnaire method. *Journal of Financial Planning* (Denver), vol 16(8), p48-55.