Leaps of Faith and Quantitative Investor Risk Profiling

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Assessing an investor's risk tolerance is a critical part of the advisor / client conversation. Wealth advisors, for decades, have tried many approaches ranging from the old paper questionnaires (still widely used) to technology solutions that seek to define risk tolerance by asking the client a series of questions and converting the answers to a numeric value. This "Magic Number" then becomes the basis for building a suitable portfolio. Technology can be very seductive both in terms of presentation and the user experience. There is a real risk however that technology can automate a decision process by making multiple leaps of faith that are best left to the common sense of a thinking advisor. The Fallacy of False Precision is very real here because a computer can take a wild guess out to ten decimal places and make it look very official.

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Introduction

You board a plane because you can reliably make several leaps of faith that have a very high probability of concurrently being true:

- Two qualified, rested and drug free pilots up front
- A well-maintained aircraft with state of the art navigation and multiple redundant systems to keep the plane in the air
- FAA systems and infrastructure to avoid collisions in the air and on the ground
- TSA security to keep terrorists off your aircraft

Since the consequences of misplaced faith are devastating, if any of the preceding leaps of faith are not valid, you don't board the flight.

In many respects, the same is true of the advisor/client retirement planning conversation. The consequences of misplaced faith can also be serious and have real consequences for clients:

- Working longer than expected
- Lower standard of living
- Running out of money in retirement
- Loss of independence
- Loss of peace of mind
- Leaving a smaller estate to loved ones

Clients understand that advisors are not magicians. Advisors can’t predict what markets

will do and how that market behavior may precisely impact their retirement options. Financial planning comes down to a series of educated guesses based on what the advisor and client believe is solid information and a prudent methodology for processing that information. The advisor, as the expert in this relationship, has an obligation to make leaps of faith that are based only on a rigorous assessment of each leap individually and in the aggregate.

My approach to the challenge of investor risk profiling stems from a three-decade career of assessing the performance and risk profile of professional traders in the alternative investments industry. A few expensive lessons allocating assets over that time, have taught me to be very deliberate before making leaps of faith concerning risk management. I am comfortable with not being part of the crowd and get quite nervous when that seems to be changing.

One approach to the assessment of risk tolerance today is the concept of assigning a risk "score" by asking clients a series of questions at the start of the relationship. The answers to these questions are then processed to create a score, the "magic number", which becomes the basis for building a suitable portfolio. Inherent in this approach are four very large leaps of faith, all of which must be true, for the advisor to believe that a client's plan rests on a solid foundation. Let's examine them:

Leap of Faith # 1

We must believe that the number produced from processing the client questions is a valid indicator of that client's true risk preference. I would submit that most investors don't really know their risk tolerance until something happens in the markets that crystalizes for them if they can live with that outcome or not. Advisors regularly see examples when clients panic out of the stock market after a relatively minor correction. The old Mike Tyson quote comes to mind here: ***"Everyone has a plan 'til they get punched in the mouth."***

In a world where we start each trading day accepting that "we don't know what we don't know", I find the lack of humility implied by this "magic number" approach a little disconcerting. The world is not that simple, nor is it static. Rather, it's an ever-evolving conversation based on always-changing information.

Leap of Faith # 2

In some vendor solutions, we may also have to accept that market returns are normally distributed. There is a significant body of work which argues that normal distribution assumptions tend to understate both the frequency and severity of losing periods. If you are interested in drilling further into this research, here is a Google search into some examples. Normal distribution assumptions are easy to make but betting someone else's future on them is a leap too far for me.

Leap of Faith # 3

The period used as the look back window for performing risk analytics can significantly impact the range of projections. In the case of one vendor solution, the period after the end of the financials crisis drives all their calculations. If you think about market performance since March 2009, you would be hard pressed to pick a more benign window for modeling risk. The risk of using such a benign time period to model potential downside outcomes is that an advisor

can incorrectly set client expectations based on projections that are far too rosy.

Leap of Faith # 4

Now we must also believe that we can build a portfolio that perfectly aligns with the magic number derived above. To be candid, I don't fully understand how we can even be remotely confident that a portfolio built using the leaps of faith above will stay within an investor's risk appetite based on the risk profiling questions.

An Alternative Approach

Having highlighted the potential pitfalls of quantitative investor risk profiling, I feel the duty to propose an alternative approach. This paper is not the place to drill into all the details but, at a high level, I see a very different client conversation about risk that includes the following:

1. First, accept that there are no *Silver Bullets* when modeling risk. Every approach has limitations but may still offer useful insights if approached with humility and respect for the limits of that methodology.

2. Client risk tolerances can evolve over time, so a one-time snapshot is not enough. I believe that a part of every client planning meeting should include a risk segment that probes potential changes in the client's risk appetite. This recurring conversation has the benefit of sensitizing the client to the always-present portfolio risk and hopefully also builds the required client confidence in their investment plan to avoid making emotional decisions during periods of market stress (or euphoria).

3. Automatically stressing client portfolios against various shock scenarios over time can help clients better understand the potential impact of downside outcomes to assess if they can live with them (risk projections are not guaranteed, of course). The advisor can ask the client direct questions about specific scenarios and provide direct answers which can be logged in the system for automated monitoring to trigger risk alerts if the portfolio drifts outside that particular client's stated tolerance levels. If these questions are repeated over multiple meetings, both the advisor and the client will develop a better understanding of the evolving risk level that the client can actually live with.

Conclusion

We all try to balance the risks we are willing to assume with the potential consequences. If you go to a restaurant based on a glowing online review and are disappointed by the experience, you simply don't go back. The consequences are minor both in terms of time and cost. In my hypothetical flight example above, I argued that you would not rationally board that flight unless you believed that all the leaps of faith you were making were concurrently true. Even a single invalid leap of faith would keep you on the ground.

Finally, I am pragmatic and recognize advisors tend to view risk solutions as prospecting tools to help them grow their practice – a vital activity for any financial advisor. The question to consider when selecting a risk monitoring solution for your clients is very simple: Would

you assume that all four leaps of faith above are true if you were planning your own family's retirement portfolio?

Neither would I.

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