Synaptic

The Synaptic Guide to Risk

What you need to know about risk and using risk profiling and asset allocation tools

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What you need to know about risk and using risk profiling and asset allocation tools

Introduction

There are several reasons why risk is one of the most difficult areas of financial advice to get right. The purpose of this guide is to walk practitioners, whether financial services companies, paraplanners or financial advisers, through this complicated subject and demonstrate how mastering risk through doing research and using tools can improve the delivery, quality, consistency and compliance of your advice.

Use the insights from this guide to turn risk and suitability from a regulatory liability to a driver of profitability, making it easier to delight clients with the controlled outcomes that accurate financial plans can deliver.

For more than 20 years now, Synaptic has provided advisers with risk tools that combine the risk profiling of clients and the formulation of asset allocation strategies on which to base investment recommendations.

This guide will draw on our experience of using risk to our customers' and their clients' advantage.

The wider context of advice

Regulatory initiatives, including the Retail Distribution Review (2012), have promoted a client-centred, holistic approach to financial advice, moving it further into goal-based financial planning territory and away from the emphasis on product-pushing that existed at a time when behemoth providers and commission dominated the financial services industry.

Research and due diligence were focused on providing evidence of the whole of market and were based on features. Compliance has now shifted from case-by-case to client type or segment (PROD) and in today's age of information and technology, when there is less differentiation between platforms and products, proof of suitability has shifted from features to an investment's alignment with a customer's goals, alongside risk management and cost disclosure.

Advice is almost unrecognisable from even a few years ago, when costs (including fund costs and charges and even adviser charging) were routinely undisclosed and risk was usually only a nod towards volatility, unqualified risk labels and marketing literature. Anyone who follows the Financial Services Ombudsman's findings knows that, today, an inadequate assessment of a client's risk profile or a recommendation of ill-judged risk will immediately result in a judgment against the adviser.

The industry mega-trend of vertical integration

The one-man bands of yore are being replaced by organisations representing groups of advisers, whose ability to deliver quality, auditable advice is paramount. This trend is part of the industry mega-trend of vertical integration, in which the ability to link the 'manufacture' of investment solutions to 'distribution' secures the 'value chain'. This enables large, well-capitalised businesses to retain both their foothold in the market and the flexibility of their proposition.

The role of risk and other research tools in this context is as valuable to larger organisations seeking to deliver advice across larger groups of advisers as it is to small or micro advice businesses that don't want to be disadvantaged by the quality of their research and advice processes.

The distinction between research and advice

Research's role is unequivocally set out in the Financial Conduct Authority's (FCA) Thematic Review document1 as defining the difference between good and bad advice. It puts suitability at the centre of advice and, by extension, advisers' key contribution. There are too many emotional facets, compromises and complexities in advice for it to be automated any time soon, but research can and should be automated. The FCA talks about a "culture of challenge" in which research is on tap and constantly reviewed, and decisions are made on the best information available2.

Advice depends on research and there are factors that make research effective:

⟩ Access to all the relevant information, either at point of sale or review.

⟩ Interoperability of systems, where tools are aligned and able to share data.

⟩ Key processes can be automated and streamlined to provide robust, repeatable and reliable illustrations and evidence to support recommendations.

⟩ Research reflects the very best, academically-rigorous methodologies that have been market-proven through multiple market cycles.

⟩ Intuitive and easy-to-use tools providing research that keeps the adviser fully compliant and able to engage with clients to formulate the best recommendations for their circumstances.

⟩ Research is reliable enough for clients to base their understanding and informed consent on it.

It comes down to suitability and the role of the adviser

A client's financial plan relates to the investment recommendations within it via the regulatory concept of suitability. It isn't the investment itself that's suitable; the recommendation is suitable depending on its ability to deliver on the plan, and decisions around risk, including expected returns, define that suitability must exist as an illustration.

This is a lot for a customer to understand in an illustration, which is why we rely on the stochastic forecasting offered by Moody's Analytics and available to firms via Synaptic. Risk delivers the financial plan's investment returns and is best exploited and managed by using Moody's projections, which can only be probability-based and are subject to constant revision.

What does the FCA say about the use of risk profiling and asset allocation tools?

The FCA's current emphasis on risk and suitability was firmly established in the key guidance consultation paper **FCA GC 11.01 (2011): Assessing suitability: Establishing the risk a customer is willing and able to take and making suitable investment selection**[3].

At the time of publication, the FCA's view on the competent use of risk profiling tools was scathing. Between March 2008 and Sept 2010, it reviewed 366 cases and more than half of them – 199 – failed "because the investment selection did not meet the customer's attitude to risk". Having identified a client's appetite for risk, the advisers were unable to select an appropriate investment.

The FCA uses the phrase "willing and able to take" as shorthand for risk due diligence. In the key guidance consultation paper's findings, the principle failure in making an adequate risk assessment is not the ability to assess a client's risk profile but the failure to "take appropriate account of their capacity for loss", including highlighting customers who should be in cash deposits because they are "unable to accept the risk of loss of capital". The paper also highlights the role of inflation as a risk, because of its ability to "erode the value of capital".

The challenge that the paper presents back to advisers is to understand their tools with their limitations, and to ensure that each part of the suitability journey is effective, accurate and, most importantly, correctly aligned. The paper underlines that "firms remain responsible for assessing suitability, including assessing the risk a customer is willing and able to take, even when using tools". It warns that, in further action:

"We will be looking to see how firms have acted on this report. We will consider, for example, whether firms have robust procedures, tools and risk category descriptions (where used) to establish and check the level of risk a customer is willing and able to take, as well as assessing the suitability of investment selections."

Set up an investment strategy

This guide will provide a practical proposal for setting up the most robust investment strategy possible, combining:

❯ A market-leading Attitude to Risk Questionnaire (ATRQ) from A2Risk.

❯ Risk categorisations and asset allocation model from Moody's Analytics.

❯ Two key research capabilities, also directly from the Moody's model:

  ❯ The ability to project fund growth and investment outcomes, using stochastic modelling from Moody's Analytics to support financial planning decisions around client goals

  ❯ The ability to quantify short-term investment losses to complete defendable and meaningful assessments of capacity for loss.

Without these key components, research, advice and clients' outcomes are unlikely to be of the highest quality, which may be unacceptable to the FCA and clients, and certainly to advisers aspiring to deliver advice of the highest standard.

What difference does MiFID II make to demonstrating risk and suitability?

MiFID II and supporting directives issued by the FCA in PROD4 shift the burden of due diligence from making a recommendation based on 'whole of market' research to making one based on the client type or segment. Solutions are therefore configured at proposition level, mainly referred to as the central investment proposition or CIP. This means that proof of suitability relies on matching a client's attributes to a client type (typically a life stage such as young professional / asset gatherer / saving for retirement / at retirement / in retirement).

COBS 9A.2.4: Assessing the extent of the information required: MiFID II business

The specific transaction to be recommended, or entered into in the course of providing a portfolio management service, satisfies the following criteria:

1. It meets the investment objectives of the client in question, **including client's risk tolerance**.

2. It is such that the client is **able financially to bear any related investment risks consistent with his investment objectives**.

3. It is such that the client has the necessary experience and knowledge **in order to understand the risks involved** in the transaction or the management of his portfolio.

MiFID II now dictates a full review of suitability in review (as well as point of sale)

MiFID II identifies research as relevant to before or after a transaction (recommendation), using the terms "ex-ante" and "ex-post". This strengthens the requirements for suitability set out above, as MiFID II demands that suitability is fully re-assessed as part of the review at least annually. Reviews didn't previously have this onerous requirement.

To structure this, MiFID II requires an ex-ante illustration to include a forecast of growth, costs and charges for the first year to set up the first-year review, at which point an assessment of accuracy of the previous forecast must be made and accounted for. This is clearly an impossibility without reliable forecasts for growth and sophisticated analysis.

Making accurate forecasts of investment growth, coupled with accurate charging data, is the easiest way to ensure that firms only have to do the minimum amount of work to meet MiFID II disclosure rules and that they don't have to do additional research outside of the ex-ante or ex-post review.

The experience of many firms is that conforming to MiFID II standards can be difficult. Some firms have given up new business because of the onerous amount of research required to set up a new customer. Whereas 'best endeavours' may provide some cover in the short term, firms that are serious about thriving in the post-MiFID II world will need to review their research capabilities to avoid being bogged down in research and manual report writing.

Compiling MiFID II reports by hand is prohibitively expensive; it typically requires data from multiple sources, calculations from standalone tools and work to align reporting dates and valuations, before trying to compile reports without making mistakes.

The recent Lang Cat and Origo report "A disconnected world: an adviser's reality"5 is a sobering read, explaining the typical reality of using this kind of manual intervention. It quantifies an administrator's ceiling for management of assets under advice as being £30m, a key pinch point not only in advice's quality but in its scalability.

Many firms interpret the requirement for research as being equivalent to disclosure. This isn't the complete picture. The regulations dictate that the effect of costs and inflation must be itemised and illustrated. This can't be done without an illustration of a client recommendation.

Everything points to the need for serious research and projection capabilities. To examine this further, we need to revisit the classic risk governance model promoted by the FCA, MiFID II and the principles for best advice honed by successful firms over the last few years – the need to take risk, capacity for loss and a client's risk profile.

MiFID II inducement rules and research – the best research is independent

Many firms rely on research, or tools providing research, from platforms or providers. This is problematic for several reasons, mainly because this is an area that can come into conflict with a firm's fiduciary responsibility to act in a client's best interests. In the platform market study6, adviser platform tools and services are graded A – C, where B and C include portfolio management, asset allocation, risk profiling, retirement modelling and research and best-buy lists, all of which are linked to the firm's risk profiling or asset allocation activities. In the FCA's view, firms are likely to be receiving a non-monetary benefit from the provider if they rely on provider-sourced research and tools, and bias may taint their investment decisions.

At best, this is an awkward conflict of interest that needs be managed. At worst, it could be detrimental, or considered detrimental, to the client's best interests. This is covered in chapters 2.3 and 6.1 of the FCA's Conduct of Business Sourcebook.

When there's a grey area about what constitutes a non-monetary benefit, firms may find themselves compromised or forced to make changes in a hurry. It's better to rely on tools that aren't directly connected to platforms or providers. As an independent research company, Synaptic's tools are independent of providers, platforms or other vested interests.

"Responsibilities when using tools" in the FCA GC 11.01 says that "firms remain responsible for assessing suitability, including assessing the risk a customer is willing and able to take, even when using tools". This is the clearest indication that firms should be in full control of the research and independent evaluation of their recommendations, for which they remain liable, and not be reliant on providers.

Using tools to deliver on the classic risk governance model

In "Assessing suitability" in GC 11.01, the FCA warns that its follow-up to the report will be "intrusive and intensive". It will be looking to see "how firms have acted on this report", threatening to take "tough action where we identify poor practice".

The FCA says: "We will consider, for example, whether firms have robust procedures, tools and risk category descriptions (where used) to establish and check the level of risk a customer is willing and able to take, as well as assessing the suitability of investment selections."

A further point is that "firms remain responsible for assessing suitability, including assessing the risk a customer is willing and able to take, even when using tools. Firms need to recognise where a tool has limitations and mitigate these in the suitability assessment process".

Summary of FCA concerns about the use of tools

Inconsistency

❯ The principle concern identified in the paper was that the research underlying the risk categorisation and the outputs for the ATRQ was not adhered to, or credible.

❯ This shouldn't be a concern for any of the reputable questionnaires, including the default A2R questionnaire in the Synaptic toolset, but it would be a concern if the wording or the scoring had been altered, as it's unlikely that anyone other than an academic specialist could conduct the statistical research and analysis to ensure that the results for the sample population were valid.

Alignment

❯ The mapping of the questionnaire scoring should be correctly aligned to the investment strategy as represented by the asset allocations.

❯ In the case of the Synaptic proposition, the risk categories, descriptions and mapping to the asset allocations are all reviewed and maintained in alignment with the latest academic review. The strategic asset allocations are updated quarterly and the questionnaire is tested every two years.

❯ Customised versions of the questionnaire and the strategic asset allocations do exist, but these are carefully mapped and reviewed against the default.

Reliable methodology

❯ The profiling of a client and mapping to an investment (at point-of-sale or review) via the investment strategy must be reliable.

❯ The advantage of the Moody's risk framework is that it is model-driven and, unlike other propositions, not reliant on analysts' qualitative assessments for risk. This means that there's always an objective measure for risk that can be applied across the entire universe of retail investment (as long as an asset allocation can be identified). Alignment is transparent and reliable because of the consistent labelling and application.

The dangers of mixing and matching questionnaires and asset allocation strategies

The overarching danger to firms that must be avoided at all costs is mixing and matching ATRQs and investment strategies. The outputs from the A2R questionnaire won't mirror another system's risk categories and vice versa. A risk category 10 from Moody's will typically have 12%-30% emerging markets allocation. The next most widely used questionnaire aligns a risk category 10 with an asset allocation for emerging markets of more than 60%.

Using the A2R questionnaire scoring will tend to spread respondents more widely across the investible range, whereas the alternative questionnaire scoring will tend to corral respondents towards the middle of the available range. Firms can't take risk labels or descriptions at face value. They must have objective research relating to the sample population to demonstrate whether their investment strategy is fit for purpose.

02 Client risk profiling

The industry has developed a very competent framework to marry a client's individual circumstances with an appropriate investment strategy. The first part of the process is evaluating the client's risk tolerance using an ATRQ.

❯ Using a reputable questionnaire ensures that you're imposing an objective framework over something that's inherently subjective.

❯ The questionnaire is psychometric; it relies on survey and analysis to calibrate the scoring and ties the results of a single respondent into a wider population using statistical techniques based on population samples.

❯ All the main issues relating to investment are covered in the questionnaire – this will help you to structure responses into a format to demonstrate compliance.

❯ Compliance officers always remind us that the process is not a 'sausage machine', churning out identical outputs, but the result should be used as the basis of a conversation in which a correct categorisation for risk is explored and tested.

Another important point is that a single client can only have one risk profile. They may have different parts of their financial plan with different objectives and timelines that are aligned to different risk strategies, but the 'attitude' part of their profile is shown by research to be quite consistent over time.

How to use the ATRQ

The ATRQ frames all the important risk-based discussion points to explore and arrive at a client's risk profile, including experience and knowledge of investment. The FCA has warned that a client shouldn't be invested in a risk strategy beyond their stated level of comfort (attitude to risk). As indicated, the level of comfort isn't the score from the questionnaire; it's the level that the client agrees with the adviser through discussion, achieving informed understanding.

Discuss the individual questions and responses and use the discussion to explain to a customer the dynamics of risk and reward within the context of their financial circumstances. Comparing the Moody's min gain and max gain is an ideal way to demonstrate the asymmetry of returns offered by investment over the long term, the capture of which is the goal of investment.

You should use the kind of gains and losses as illustrated in the Moody's asset allocation model section to provide the investment context to the 'attitude to risk', alongside the 'need to take risk' and 'capacity for loss'.

You should carefully document the discussion and its outcome.

Does every recommendation need to mirror the client's attitude to risk?

Your recommendations to a client don't need to all be of the same risk category, because the 'need to take risk' and 'capacity for loss' may vary between objectives (even if the client risk profile is consistent). Your discussion with the client may increase their understanding and willingness to take risk. Again, you should carefully document this (including revisiting the ATRQ). This is one of the most challenging aspects of using the ATRQ, but it should be fine if the firm is clear on the following point in GC 11.01 3.15:

"Firms should be aware that customers may have different needs and be willing or able to take a different level of risk to meet these needs. For example, some customers may be willing to take a lower risk with their short-term saving needs and a higher risk with their long-term pension arrangements."

Inappropriate focus on the risk that a customer is willing to take

Finally, a reminder of the pre-eminence of the financial plan and the importance of suitability. In GC 11.01, the FCA says that attitude to risk can't overrule the need for an adviser to establish "the customer's other needs, objectives and circumstances… while attitude to risk is an important consideration, suitability is not just about making investment selections that reflect a customer's attitude to risk".

03 The need
to take risk

**FCA executive Debbie Gupta said in 2019:
"Our focus is a very simple one –
has the client received suitable advice?"**

The concept of a recommendation forms the cornerstone of the regulatory framework. Advice is a regulated activity. At the time of writing, there is still no backstop, where an adviser may be released from responsibility for the consequences of a recommendation. These go to the grave! In any challenge, the question will come back to suitability, so it's never been more important to provide a reliable forecast in the form of an illustration to establish the 'need to take risk'.

Advice (and now compliance) is only as good as the illustration

Most compliance activity is focused on disclosure but, before disclosure, you must create an illustration of the investment journey. Before MiFID II and RDR, a provider illustration was fine but, as recommendations need to be framed more in the context of a client's life goals and aspirations (financial planning), better tools to illustrate that journey are now required.

Whereas simple illustrations from a provider with low, medium and higher growth assumptions, say 3%, 5% and 7%, were sufficient in the past, this doesn't meet current requirements for suitability and informed consent. You must model the effects of risk, costs, inflation around clients' specific circumstances.

You must establish some concept of a goal, to provide context to any growth, against which the success of a plan can be judged. Growth only exists with risk, so your main role is to help your client to understand the role that risk will play in delivering against a goal.

Creating an arbitrary target amount for a goal doesn't always work. Goals may be aspirational, for example maximising the returns over the long term in pension savings, in line with a client's tolerance for risk. Another example may be a requirement to keep funds linked to a shorter-term spending goal invested, for example, in saving for a deposit for a house. The goal may be to protect funds against the erosion of inflation over a couple of years and ensure availability of those funds at short notice to complete a purchase. These two investments, with different funds, goals, risk and reward profiles attached to them may belong to the same client.

The best way of illustrating the path to these goals is using probability-based forecasts, in which the full range of viable outcomes, not just average case, can be presented.

Stochastic projections as the basis of investment forecasting

Over the last few years, as firms have become better qualified and more professional, they have started to borrow more from institutional investment risk management and using stochastic-driven tools, capable of providing a forward-looking projection.

It's generally accepted, backed up by numerous studies[7], that asset allocation drives investment returns across the full range of asset classes. The incredible success of Vanguard (more than 50% fund inflows in the US during 2019) bears witness to this trend of investors who aim to capture the market return, rather that speculate in individual stocks.

Stochastic modelling is the principal forecasting technique available, and there are several advantages to a stochastic approach in financial planning.

Using a probability-based model to describe a range of viable outcomes enables the adviser to control the conversation and explain the investment journey ahead. This is critical to ensuring that a client stays confident of the investment outcome, even when they experience losses, and is likely to stay invested.

The adviser conducts the conversation in the context of the client's circumstances and goals: for example, how much money do I need for retirement? How much income can I afford to take in retirement? How should I invest to meet my children's school and university fees? How can I provide for dependents when I am gone? How can I understand the risks? Where should I be invested?

Using Moody's stochastic engine, the Economic Scenario Generator, for financial planning and compliance

The two additional components of the classic risk governance model to the client's risk profile are the 'need to take risk' and 'capacity for loss'. We can now turn to the role of Moody's Analytics' stochastic engine, the Economic Scenario Generator, in providing insight in these two key areas.

Moody's Analytics provides the market-leading stochastic modelling solution, which is unique for many reasons, not least for its reliability (confirmed in retrospect). Stochastic modelling is relatively new for advisers, but it's well known to the FCA and widely employed by a range of institutions including Royal London and Standard Life Aberdeen, and by many discretionary managers who have relied on Moody's for their portfolio optimisation and market forecasting.

The two elements that make up the Moody's model are:

In this way, a deterministic view of limited possible outcomes is replaced by a universe of possible outcomes from which clients can make better-informed decisions. There are many stochastic models that haven't been accurate in hindsight, and therefore can't compare with Moody's credentials.

There are stochastic techniques such as mean-variance-covariance models that differ fundamentally as they describe distribution around a single mean – again, not comparable to Moody's. The rules in the Moody's model alluded to above recognise that asset classes and market conditions have many different characteristics, and these require a range of different calculations.

Similarly, the model recognises the macro behaviour of indexes, for example reversion to the mean. It also has rules to govern asset classes' interaction, for example if corporate bonds perform very strongly, assumptions can be made about the relative performance of global equities and vice versa.

01 The rules and constraints that define the universe of viable trajectories for asset classes and market inputs that make up the model.

02 The simulation that is regularly run using the model assumptions - a mathematical technique that involves an element of random generation to create thousands of scenarios from which probabilities of all outcomes can be ascertained.

Concerns about the use of stochastic models

Concerns about complexity are justified, but the methodologies employed within the Moody's model are well documented and you can monitor its outputs closely. Its limitations are relatively easy to understand and account for.

The model's limitations

❯ It can't forecast an investment outcome or profile risk if an investment or strategy can't be presented as an asset allocation.

❯ No qualitative overlay exists as part of the model-driven results, so firms can deal with these separately. Synaptic has a close relationship with RSMR, which provides firms with fantastic qualitative research and resources to help in this area, and we defer wherever possible to them. Unlike our competitors, we don't believe that model-driven risk profiling and risk-profiling achieved with a qualitative overlay can or should be conflated. Decisions about style, emphasis, ESG, active versus passive, manager or fund promoter selection, growth versus momentum and every other flavour of qualitative consideration that may be relevant can and should be dealt with separately from the risk profiling exercise, which should remain as objective and transparent as possible.

❯ Investments that can be problematic in terms of identifying an asset allocation include absolute return funds, although many conform to the characteristics of the hedge Moody's asset class (moderately cautious), with-profits or funds that:

> ❯ Rely significantly on securitisation or risk mitigation, such as currency hedging or smoothing of returns

> ❯ Take risk assessment into more complex and less predictable areas, for which other methodologies may be more suitable (representing investments that are likely to be less suitable for retail clients).

A note about volatility

The FCA handbook specifically warns against using volatility as a proxy for risk, a practice that's receding all the time but that still has an overly significant role in many risk models. There's a volatility value produced as part of the Moody's output, but this isn't promoted for use in financial planning or suitability assessment, other than as a reference point.

Periods of high volatility are usually short-lived, and periods of low volatility can persist. Most volatility-based analysis is unreliable as it can change abruptly depending on the historical term that's selected. For example, a three-year calculation can be half the volatility of a five-year calculation for the same investment.

Taking a deterministic view of volatility is, therefore, of very limited use whereas stochastic analysis can capture an investment journey's characteristics much more accurately.

Stochastic research's reliability

Forward-looking models' out-performance is starting to be better understood, following research on the subject such as Poon and Granger's Forecasting Volatility in Financial Markets report in 2003[8]. Poon and Granger reviewed 18 case studies and found that forward-looking analysis provided better investment returns in almost every case.

Observation of the Moody's model in many market cycles over the years has confirmed its reliability and its ability to apportion risk (as loss) to asset classes, and to predict asset classes' interaction in diversified portfolios. During 2008's financial crash, losses in typical adventurous portfolios aligned almost exactly with expected losses for a bad year forecast in the model. (Typically a 23% loss, which is what happened).

04 What are some of the model's attributes that will benefit firms?

Around 30 world economies
are modelled, including currency
and geographical asset classes.

The configuration of the model in Synaptic is mapped to 22 main asset classes, to which a further 500+ classes can be mapped with minimal loss of accuracy. These asset classes' risk characteristics can be seen in the table below (values are %). Moody's methodology has been accurate in the past and we believe it will continue to be the most reliable forecast in the future.

	Term	Type	Min Gain	Max Gain	Mean Gain
Cash	10	Strategic	-1.16	5.4	0.9
UK Corporate Bonds	10	Strategic	-12.22	15.46	1.04
UK Fixed Income	10	Strategic	-8.83	11.17	0.3
UK Government Bonds	10	Strategic	-9.61	11.31	0.05
Hedge Funds	10	Strategic	-10.81	13.95	1.9
Global Bonds (excl UK)	10	Strategic	-12.26	20.32	2.73
US Fixed Income	10	Strategic	-14.2	24.07	3.25
European Fixed Income	10	Strategic	-14.83	20.44	1.44
Global Property	10	Strategic	-16.61	27.6	4.52
UK Index Linked	10	Strategic	-17.92	18.3	-0.81
High Yield Corporate Bonds	10	Strategic	-17.8	24.3	2.17
Property	10	Strategic	-18.82	26.94	2.56
Global Equities (excl UK)	10	Strategic	-23.97	37.44	6.97
UK Equities	10	Strategic	-26.78	32.83	4.17
US Equities	10	Strategic	-24.97	40.15	7.46
Asia Pacific (excl Japan) Equities	10	Strategic	-30.45	41.98	6.41
Global Infrastructure	10	Strategic	-31.5	35.96	4.2
Commodities	10	Strategic	-31.68	44.03	0.94
European Equities	10	Strategic	-31.74	44.53	6.26
Japan Equities	10	Strategic	-33.77	49.08	5.75
Emerging Markets Equities	10	Strategic	-45.03	51.9	5.86
Global Private Equity	10	Strategic	-45.06	83.73	9.81

A workable model for managing market risk in retail advice

Having reviewed the shortcomings of volatility and the use of historical data, what should an adviser expect from Moody's? Investors and their advisers may need to embrace greater risk than they have before for the same returns, and the markets' complexities are making these calls even more challenging.

Numerous studies9 and the FCA (as we have seen) have highlighted the primary importance of asset allocation in investment decisions, recognising that it's the primary driver of investment returns. Choosing arbitrary growth rates (for example 3% / 5% / 7%) may describe a range of outcomes but it doesn't convey the proportionate risk, experience of the journey, impact of sequence risk and, most importantly, the trends that deliver returns despite volatility.

Understanding sequence risk is critical in financial planning, where the loss of compound returns in a journey during which the bad years occur earlier in the term will result in an overall lower fund value than if they occur later in the term. This is perfectly captured and presented in a stochastic forecast, in a way that clients can understand.

Capacity for loss and the Moody's value at risk (VAR) metric, min gain

The min gain values in the table on the previous page can be calculated for any asset allocation and, therefore, any client portfolio. It's a VAR metric (more than 12 months) that provides the basis for a client's understanding of what losses in an investment journey may look like, and therefore the basis of aligning a client's appetite for risk and need to take risk with a suitable investment, based on their capacity for loss. The min gain is a stochastic value taken from the distribution of possible outcomes, identifying the extent of losses observed at the 95th percentile (1 in 20). This makes it possible to predict the extent of losses in a bad year also defined as 1 in 20.

As the Moody's model also provides an ave gain or expected return, portfolios can be compared to the 'efficient frontier' created by the Moody's strategic asset allocations, defining the boundary for each risk category. By mapping to this model, you can identify a risk profile for any investment.

Inappropriate levels of risk provide poor investment outcomes - too little risk as well as too much risk can affect an investor. It's about making the correct assessment for a client's tolerance for risk, which takes into account their attitude and circumstances. This is an extremely important assessment to get right, especially in retirement.

As we've established, capacity for loss is defined as "the risk a client is willing and able to take", without affecting their standard of living. You'll almost certainly require a cash-flow model to plot a client's financial situation over a term, and the min gain value will allow you to have a meaningful discussion about how anticipated losses will affect their financial circumstances at any point.

Capacity for loss and term

Term changes everything, including capacity for loss. The higher the capacity for loss, the higher the investment risk clients can afford to take. Investment risk diminishes as the term extends, as sequence of return risk is mitigated.

Why do product providers recommend portfolios with high equity content to cautious investors? When a fair assumption can be made regarding the client's long-term commitment to the term, which is often the case in pensions recommendations, this can be deemed suitable. On the Royal London website, for example, portfolios with high equity content are indicated as suitable for cautious investors.

Establishing the client's long-term commitment to their investment term, in conjunction with the A2R questionnaire (below), will qualify the role of term in increasing capacity for loss. It may be appropriate, therefore, for a balanced investor normally looking for a VAR measure (more than 12 months) of no greater than 15% (loss in a bad year) to be able to tolerate a riskier portfolio with a VAR measure of 20% or more, if a longer investment horizon can be assured.

The additional capacity for loss questions are shown below. They aren't scored in the way an ATRQ is, as there is greater reliance on your judgement. This secondary questionnaire therefore offers structure to the discussion and implies a format for recording your final recommendation on risk.

CAPACITY FOR LOSS STATEMENTS

A2RISK

a) I will need to start spending my investment at the following point in the future:

My investment horizon is:	Less than 3 years	3-9 years	10-14 years	15+ years
☐	☐	☐	☐	☐

b) I don't have any significant outstanding debts and don't expect to incur any during the period of my investment (e.g., mortgage or credit cards).

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
☐	☐	☐	☐	☐

c) My spouse or partner (or another family member) is likely to be able and willing to support me financially if circumstances require.

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
☐	☐	☐	☐	☐

d) It would be relatively easy for me to cut my spending in retirement if circumstances require.

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
☐	☐	☐	☐	☐

e) I am flexible about my investment horizon – I could wait before using my investment.

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
☐	☐	☐	☐	☐

Customers have a lower capacity for loss when some or all of the following apply:

❯ They have no way to replenish their capital (for example, no longer earning).

❯ They rely on the investment for income to meet expenditure.

❯ They have a short investment horizon (losses are unlikely to be recouped before crystallisation).

❯ They are exposing a large part of their available assets to the risk of a fall.

Rolling Stock Market returns

How does it work?

Over short periods of time, an index such as the FTSE or S&P can deliver exceptionally high or low returns. If we look at the S&P 500, 1973 – 2016, the worst one-year rolling return was -43% (to month ending February 2009). The best was +61% return (to month ending June 1983).

However, the worst 20-year rolling return was +6.4% (to May 1979). The best rolling 20-year period delivered an average of 18% a year (to March 2000). So, you could argue that, if you're definitely going to be invested for 20 years, capacity for loss is irrelevant. The trouble is that isn't how compliance works!

Rolling Stock Market returns / S&P 500 historic data

The Ombudsman doesn't adjudicate on the ability of any sector, strategy or index to achieve profitability in the long term. It adjudicates on the experience of loss in the short term (capacity for loss). It may be appropriate to take on risk for the long term but the dangers need to be clearly explained and understood.

The A2Risk ATRQ has proven itself over many years and is widely used, owing in part to its role as the designated questionnaire accompanying Moody's risk model. Academic research is regularly undertaken with population samples to review the alignment of scoring with appropriate risk categories, which can then be mapped to suitable investments.

The need for stress tests and extreme 'what ifs'

As the model's probability-based forecasts cover all viable outcomes, including extreme cases, stress testing is built in. Moreover, because all possible variables in relation to the market assumptions are included in the model, a single view includes all the exceptional inputs that may affect a client.

Accuracy over the long term – use of the efficient frontier

The simulation that Moody's runs quarterly, capturing the current asset class and market values, produces outputs that look like this, enabling an efficient frontier to be identified:

Efficient Frontier

● All Portfolios	
● Optimal Portfolios	

Cash	60%
UK Corporate Bonds	30%
Property	0%
UK Equity	5%
Global Equity ex UK	5%
US Equity	0%
Emerging Markets Equity	0%

One of the many methodologies employed in the Moody's model is 'best views' vs 'dynamic equilibrium' (DE). The former is included in the configuration available to Synaptic customers, and it will deliver forecasts on demand to reflect a client's individual circumstances and goals. The latter describes the constraints that are imposed when Moody's formulates the strategic asset allocations that define the efficient frontier.

Stochastic techniques are already proven to be accurate in long-range forecasting, and using DE increases that long-term accuracy by concentrating asset classes that are (relatively) more predictable.

This comes at a slight cost to expected returns and means that a client portfolio may exhibit better return characteristics than the efficient frontier. For example, at the time of writing an overweight to global bonds will return higher forecasts than the strategic asset allocation.

Tactical versus strategic

Financial planning is, of course, a long-term exercise; however, the Moody's model allows Synaptic to supply tactical and strategic asset allocations as part of the risk profiling exercise. This helps you to monitor and gain insight into short-term positions that an asset manager may be taking (tilts). This was very useful, for example, at the height of the COVID-19 crisis, when significant tactical positions were being taken away from the strategic position. However, advisers would remain invested based on what was published for the strategic asset allocation.

Here's an example of two asset managers' use of strategic and tactical allocations, which are reviewed in the Synaptic Risk Rating service quarterly. In the case of Vanguard, they can emphasise how precise their tracking is (there's no divergence between tactical and strategic).

The Moody's efficient frontier

This defines the investment strategy that can deliver a consistent, repeatable and optimised model for advice. Underpinned by Moody's expertise and proven capabilities, it's the most reliable framework for risk and advice available, in our view. The ATRQ maps directly to the asset allocation, and you can easily align any portfolio or instrument (for which an asset allocation exists).

The screen below is from Synaptic's Risk Explorer tool, showing the range of the efficient frontier with a client portfolio plotted alongside. You can see at a glance that the client portfolio is either too risky for the return or offers too little return for the risk, indicating an action for you.

The Moody's asset allocation model

The default risk framework aligned to the ATRQ and the investment strategy is defined by fixed risk boundaries, as measured by the min gain (VAR). This can be ranged 1-5 (with decimalisation) or 1-10, or it can be customed when a client wants to add an additional ATRQ, deploy an in-house asset allocation model or define bespoke risk categories (for example 1-7, low to high risk) with bespoke descriptions.

1-10 is a subdivision of 1-5, so it aligns on every other 1-5 risk category.

1-5 Strategy

Risk category	Boundary (min gain)	Range (min gain)
Cautious	-7.50%	0 to -7.5%
Moderately Cautious	-12.50%	-7.5% to -12.5%.
Balanced	-17.50%	-12.5% to -17.5%
Moderately Adventurous	-22.50%	-17.5% to -22.5%
Adventurous	-27.50%	-22.5% to -27.5%

1-10 Strategy

Risk category	Boundary (min gain)	Range (min gain)
Very Cautious	-5%	0 to -5%
Cautious	-7.50%	-5% to -7.5%
Moderately Cautious (lower end)	-10%	-7.5% to -10%
Moderately Cautious (higher end)	-12.50%	-10% to -12.5%
Balanced (lower end)	-15%	-12.5% to -15%
Balanced (higher end)	-17.50%	-15% to -17.5%
Moderately Adventurous (lower end)	-20%	-17.5% to -20%
Moderately Adventurous (higher end)	-22.50%	-20% to -22.5%
Adventurous	-25%	-22.5% to - 25%
Very Adventurous	-27.50%	-25% to -27.5%

The Moody's quarterly update

Every quarter, Moody's re-runs the model with current asset prices and market inputs, which manifests within the Synaptic software as an update, accessible by users for research. Part of the update is the adjustment of the strategic asset allocations that are calculated to align to the risk targets above, employing the constraints as per the DE methodology mentioned previously.

The Moody's strategic asset allocation

Although the strategic asset allocation's primary role is to provide the benchmark for how the Synaptic risk tools function, it's important to remember that risk is represented by the min gain value, not by conformity to strategic asset allocation. A client's portfolio may share a similar risk profile in respect of the min gain, but it may have a very different allocation to achieve it.

The strategic asset allocation is, however, used by firms as a guide, or at least as a starting point for constructing portfolios, which can be optimised by testing against the strategic asset allocations.

1 - 5 Strategy	Cautious		Moderately Cautious		Balanced		Moderately Adventurous		Adventurous	
1-10 Strategy	Very Cautious	Cautious	Moderately Cautious (low end)	Moderately Cautious (upper end)	Balanced (lower end)	Balanced (upper end)	Moderately Adventurous (lower end)	Moderately Adventurous (upper end)	Adventurous	Very Adventurous
Asset split type	Strategic	Strategic	Strategic	Strategic	Strategic	Strategic	Strategic	Strategic	Strategic	Strategic
Term	10	10	10	10	10	10	10	10	10	10
Cash	57	43	29	13						
UK Corporate Bonds	5	8	11	17	22	12	8	4		
UK Government Bonds	6	13	20	20	20	20	14	7		
UK Equities	4	7	10	12	14	19	22	25	26	8
Global Equities (excl UK)	5	11	17	21	25	32	38	45	56	64
Emerging Markets Equities	2	3	3	4	5	7	8	10	13	27
Global Property		3	5	6	7	7	6	5		
Hedge Funds	10	5	3	4	4					
Global Infrastructure	2	2	2	3	3	4	4	5	4	
Global Bonds (excl UK)	10	5								
	100	100	100	100	100	100	100	100	100	100

Stochastic modelling and retirement

Arguably, only stochastic modelling meets the challenge of forecasting investment returns and losses in retirement in a meaningful way, making it indispensable for retirement planning, in which investment returns may be a critical part of the plan and the client's future financial security.

Before Osborne's 2015 pension freedoms, compulsory annuity purchase created an advice culture in which risk needed to be reduced in a glidepath towards retirement, often referred to as 'lifestyling'. It may have mostly suited insurance companies seeking to sell annuities to investors but resulted in a skewed perception of investment risk in retirement for advisers.

The assessment for capacity for loss may change given the higher priority for capital preservation, but Moody's insights provide the basis of confident investment within safe risk boundaries, allowing you to properly address the FCA's concerns about inflation as a risk to be accounted for. Most modern research indicates a greater need for investment risk in retirement, not less.

Ben Bengen was the US financial planner who was the first to widely publish analysis of the role of investment risk in sustainable withdrawal strategies, which is where we get the famous rule of 4% (for the US) from, which is closer to 2% in the UK in the current investment market. Pensioners are generally unlikely to be able to afford to forgo investment returns in retirement, especially when you take into account what is available as guaranteed income via an annuity.

One hundred thousand pounds annuity in 2015 could have bought you an (indexed) income of around £2,500-3,500 per year. That is nearly your entire retirement before you get your money back, let alone make any money on the deal. If you die early, you will certainly lose!

The same amount invested in a balanced portfolio over the same period would have returned a 4% yield quite comfortably over this period and kept the capital intact, while keeping abreast of inflation. At the very least this opens up the possibility of buying a better annuity later in the retirement term. If plans can be monitored, reviewed and adjustments made to income in the event of episodes of poor investment returns, investment should be included for consideration in retirement planning in many cases.

You can do these kinds of assessments easily using Moody's stochastic calculations, accessible via Synaptic risk tools. See the appendix for illustrations.

05 Appendix

These screenshots demonstrate how risk-based probability forecasts from Synaptic's Risk Explorer software tool can be used to model investment outcomes for clients and provide proof of suitability.

Screen 1 (below) is an illustration created from a client's actual investment, with projections from Moody's Analytics stochastic engine, accessed through an integration with Synaptic. The adviser can use the projection to demonstrate the 'expected outcome' from a client's investment scenario, among the full range of 'viable' outcomes. This allows the adviser to explore the 'need to take risk' with the client in the context of goals, providing the key illustration in the financial planning process.

Screen 2 (below) is a table included for the purpose of demonstrating the relationship between investment risk and term with their respective returns. The values in the table are created by the Moody's investment strategy. It is core requirement for clients to understand the role of risk in investment and for advisers to tailor investments that reflect the correct level of risk for the client.

Illustration
Rebecca Foster · Balanced · Long Term Investment for Retirement at 55 · Created Mon 27 Jul 2020, 13:23

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✓ ⟩ ✓ ⟩ ✓ ⟩ Outcome | Report | ✓ Mark Status as Complete

Term of Investment	Initial Amount	Growth Basis	Total Solution Cost	Target Pathway	Anticipated Outcome (Mean.Gain)
17 Years	£10,000	Without Inflatic	2.5%	Long Term Retirement Portfolio	£30,600 or 13% Growth
Regular Contribution		Rebalanced Annually	Possible Max. Loss	Target Risk Category	Lowest (Min.Gain) / Best (Max.Gain)
£100 pm		Yes	21.81%	Adventurous	£12,900 / £70,250

Outcome   Edit   Compliance Details   Report Content

Investment Scenario | Client Risk Category | With Costs | With Costs & Inflation | Value of Advice | Suitability | **Term Illustration** | Sustainable Withdrawal

Forecast Investment scenario - Term Alternatives

What is Shown Here?

The term matrix table shows alternate term and investment risk options, understanding the need to take risk, and quantifying possible losses.

Capacity for Loss increases with term.

Term Matrix

Term	Asset Alloc...	Mean Gain ...	Min. Gain	Mean Gain	Max. Gain
5	4	490%	8898	11565	13744
10	5	510%	9328	13195	17291
15	6	580%	9964	15027	20485
17	6	600%	10703	16796	24556
20	7	670%	11208	18674	28276

Additional Information

In the regulatory risk governance model, 'the need to take risk' must be considered with the client's 'risk profile' or 'attitude to risk' and must not exceed a client's 'capacity for loss'.

A clients capacity for loss increases with term.

A client should understand the relationship between 'term', 'investment risk' and 'investment returns' as part of providing 'informed consent'.

About

This illustration has been generated using the Moody's Wealth Scenario Generator to determine the probable outcome of the investment given the parameters provided.

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SYNAPTIC SOFTWARE   MOODY'S ANALYTICS

Screen 3 (below) is a screen demonstrating how Synaptic is able to collate all the relevant data, including platform, product and portfolio costs, overlaid with adviser charging and the impact of inflation.

Screen 4 (below). Risk Explorer offers a unique calculation made possible by the forecasting capability of Moody's called the 'value of advice'. This compares the expected return from the advised investment scenario with the likely value of the funds should they remain uninvested, referencing the entire range of possible inflation outcomes. This brings home the value of the role of the adviser in a single view, helping to put costs including justification of adviser charging into perspective.

Screen 5 [below] is another important calculation made possible by the Moody's projection of a client's investment, demonstrating a 'sustainable withdrawal' rate for income as part of the retirement planning process. Note that an 'age of ruin' is also calculated, as is the automatic provision of an annuity value, calculated using the fund value and actual quotes from providers.

Screen 5 [below] shows how an adviser can access a workbench to test a wide variety of inputs as part of arriving at the right investment solution for a client. The use of 'What if' scenarios has been highlighted as best practice in FCA Thematic Reviews, and using Risk Explorer, can easily be created for discussion with a client.

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