WHITEBOARDING 3.0

JUNE 2018

How can we make ‘better’ investment decisions in the face of uncertainty?

Produced by Brookvine Pty Ltd

Foreword

The distinction between uncertainty and risk has been recognised as intrinsic to investing since the simultaneous contributions of Frank Knight and J M Keynes in 1920/1. Nonetheless, little to no guidance is available on dealing with it in practice.

Critically, risk is measurable in the context of winning or losing something of value. Uncertainty differs from risk by being unmeasurable. Although all states of the world and their effect on investments are assumed known, their probabilities of occurrence are unknown and unknowable. Each state may support more than just one distribution. Compared to risk, uncertainty (*aka* ambiguity) is far harder to identify let alone to manage.

A prepared mind helps protect our investments and our psyche from the ravages of uncertainty. Minds can be prepared by assessing possible scenarios (even highly unlikely ones) and their outcomes.

In our previous Whiteboarding sessions the notion of uncertainty made frequent but unaddressed appearances in participants’ discussions. Whiteboarding 3.0 aimed to bring the topic out of the shadows.

Beginning with a clean ‘whiteboard’ the key issue addressed was: How we can make ‘better’ investment decisions in the face of uncertainty?

Abstract

Current uncertainties about the path of geopolitics, economics, equity and bond valuations, and Royal Commissions seem extremely heightened. Add uncertainty about the effect of those paths on portfolios and we, the decision-makers, struggle. Uncertainty absorbs our attention publicly at conferences and in reports to clients, and privately where, in the privacy of our boudoir, our anxieties are exposed.

David Stevenson’s insight from the *Financial Times* is but one of many similar assertions.

> “The only real uncertainty at the moment is that markets are deeply uncertain … (which) betrays a deeper problem: All of us are desperately trying to prise out some over-arching narrative that makes sense of things when there may not be one. There are certainly lots of different themes … and cycles playing out at the moment. It’s just that they may not add up to anything in particular.”
>
> David Stevenson, *Financial Times*, 5 Jan 2018

Anxiety is marginally reduced by knowing that each era perceives theirs as the more uncertain. Then too there were times of no “over-arching narrative.” Yet investors then and now continue trying to make ‘reasonable’ decisions. How we do and ‘should’ do that can be improved by appreciating the difference between risk and uncertainty and by accepting heuristic ways of **decision-making under uncertainty** (DMUU).

Preliminaries

The invitation to Whiteboarding 3.0 contained an incisive warning,

> "People are so hungry for certainty that they readily subordinate consciousness and conscience to it."
> Frederik Hegel, c.1800

Participants had been sent short pieces on uncertainty in business, politics and investing. Strategy Under Uncertainty from the *Harvard Business Review*, 1997, underscored the extreme difficulty of DMUU through Kodak's $500m per year investment inventing digital photography – a courageous game-changing decision that was eventually right but adopted too late. Digital photos took off only after sharing platforms such as Facebook and Instagram were invented, but Kodak could do little to prepare for that unknown (unknowable?) disruption.

The warm-up

Participants were asked to nominate investment-related uncertainties they would most like to have certainty about. Top 3 responses:

1. Inflation
2. Valuation
3. Climate change

… with Trump as an (dis)honourable mention. The 2018 World Economic Forum's top ten risks (better described as uncertainties) has but a single one directly related to investing (one aligned to participants' concerns about valuations): 'Asset bubbles in a major economy', which came in at number 10.

Participants were also asked what they were most certain about regarding investing. Top 3 responses:

1. Diversification
2. Equities offering the highest long-term returns
3. High valuations

… with shifts in global power and creative destruction rating honourable mentions.

Both questions led to further nuanced discussion and disagreement. Indeed, the group was on the whole unsure if there is more uncertainty now than before … or if we are just more aware of it.

Even wise economic historians such as J K Galbraith see past eras as more certain than the era in which they lived and worked. That hindsight bias, which re-enforces Hegel's warning, was evident in participants' discussions. Some saw the tsunami of noise from social media as evidence that this time it *is* different, that uncertainty now *is* greater than in the past. If that's the case, we need to improve our DMUU.

A tour of uncertainty

An interactive presentation[1] through risk, uncertainty, and ignorance laid the foundations for later discussions.

Risk in investment models and tools such as MPT[2], Black-Scholes[3], CAPM[4], and Optimisers is usually defined as volatility of returns or one of its modifications such as β[5] or CVaR[6]. Critically, risk is measurable.

Ideally, all possible states of the world and their effect on investments are assumed known as are their probabilities of occurrence, so the distribution of possible outcomes and their covariances is assumed known. In practice, we rely on these models and assumptions too, albeit with a healthy degree of scepticism.

In 2000, the late lamented Peter Bernstein warned of the risk (*sic*) of relying excessively on measurable risk.

> "Today's obsession with risk management focuses too intently on the measurement of risk. All too often, reason cannot answer … what matters is the quality of our decisions in the face of uncertainty."
>
> Peter Bernstein, 2000

Uncertainty differs from risk by being *un*measurable. Although all states of the world and their effect on investments are assumed known, their probabilities of occurrence are unknown and unknowable. Each state may support more than just one distribution.

Little is available in dealing with **ignorance** (*aka* **radical uncertainty**) where even the possible states of the world are unknown and unknowable. Making reasonable decisions under this most realistic of situations is a common challenge for military commanders, politicians, and investors. An augmented version of Ellsberg's Paradox[7] highlighted the differences between risk, uncertainty, and ignorance. Zeckhauser[8] is perhaps the only paper that attempts to address investing under conditions of ignorance.

Heuristics, 'rules of thumb'…

In theory, and in practice, when faced with risky decisions, 'rational expectations investors' choose investments that maximise the expected value of their utility function, a quantitative approach that lacks an agreed theoretical justification. When faced with uncertainty where probabilities are unknowable and utility functions have even less **ex ante** validity than under risk, investors are forced to rely on **heuristics** in making decisions, for better and for worse. Wikipedia defines a heuristic as 'an approach to problem solving, learning, or discovery that employs a practical method, not guaranteed to be optimal, perfect, logical, or rational, but instead sufficient for reaching an immediate goal'.

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1 Available at www.brookvine.com.au/news-insights/
2 Modern Portfolio Theory (MPT) is a normative theory on how risk-averse investors 'should' construct portfolios to optimise or maximise expected return based on a given level of market risk.
3 Black-Scholes is a pricing model used to determine the fair price or theoretical value for call or put options.
4 The Capital Asset Pricing Model (CAPM) is a model that describes the relationship between the expected return and risk of investing in a security.
5 Beta is a measure of the volatility, or systematic risk, of a security or portfolio in comparison to the market as a whole.
6 Conditional Value at Risk (CVaR), *aka* Expected Shortfall, is the expected return in a specified collection of scenarios with poor outcomes.
7 The paradox results (at least in experimental situations) from the common tendency to choose risky scenarios where the probabilities of outcomes are known over alternative scenarios where they're unknown. This occurs even when the chances of winning are higher in the latter scenario. That avoidance, irrational according to the dictates of 'rational expectations', leads to people making paradoxical choices.
8 Zeckhauser, R, Investing in the Unknown and Unknowable. *Capitalism and Society*, 2006.

Table 1 below contains necessarily incomplete descriptions of heuristics that **might** be useful for DMUU, which we can 'experiment' with and learn from. They are context-dependent and not independent. In some situations, combinations may be better than any single heuristic. Of course, none are 'optimal', but aiming for 'better' avoids the tyranny of searching for 'the best'.

Table 1: Heuristics for DMUU

Heuristic	Description and comments
Delay (or avoid)	Wait until there is greater certainty. A common approach that reduces anxiety but increases opportunity cost. *Delay* can loosely be seen as a form of 'buy on the fact; ignore/sell on the rumour'. Not delaying increases immediacy cost and is more akin to 'buy on the rumour; sell on the fact.' *Avoiding* may later be seen as an error of omission, but such errors are rarely judged as harshly as errors of commission, so *delay* lowers the risk of regret (see below).
MaxMin payoff	Consider 'all' states of the world with poor payoffs and choose the one with the largest payoff (*ie*, maximise the minima). A form of winning by not losing that should appeal to investors with a pessimistic bias. The market's pessimism does appear to grow with increasing uncertainty as perhaps reflected in its then stronger reaction to earnings downgrades than to upgrades. This heuristic is useful in formal games such as Bridge and Chess and is used intuitively in asset allocation decisions when many asset classes are overvalued. A modification, *MaxMin regret*, chooses from those with poor payoffs the one you will regret the least should it fail. That could appeal to large organisations where career and business risk play a significant role in judging and rewarding outcomes.
MaxMax payoff	Consider 'all' states of the world with good payoffs and choose the one with the largest (*ie*, maximise the maxima.) That should appeal to investors with a strongly optimistic bias. Lottery players and gamblers, where winning big is the dominant objective, seem to use this. Angel investors faced with an array of unknowable start-ups might use this heuristic.
MaxAvg payoff	Consider 'all' states of the world and estimate the average payoff from each. Choose that with the largest average. Useful in formal games but probably difficult to use in markets. Might appeal to investors with moderate tolerance to both uncertainty and career/ business risk.
Incremental adapting	The familiar 'toe in the water' approach. A commonly used heuristic (useful in conjunction with *delay*). Often many toes remain dry, resulting in minor allocations with immaterial impact and a consequent larger opportunity cost. It can nonetheless hedge career risk.

Amplify weak signals	Borrowed from engineering solutions in noisy environments. Diverse views and knowledge from foreign domains such as military decision-making can *amplify weak signals* and so increase certainty.
Scenario playing	Being aware of and playing with even outrageous scenarios that could occur increases serendipity, preparing minds more able to see and capture emerging but uncertain opportunities. Part of strategic thinking. Informal and hence different to scenario *planning* and stochastic modelling.
Complementary skills	Partner with people and/or organisations whose skills and opportunities are complementary to yours. Requires admission of ignorance at the cost of trusting others, eg, co-investments. Alignment is key. Probably more useful when combined with *amplifying*.
Seek control	Probably more important than trying to predict outcomes. Especially valuable in venture investing and co-investing. Requires business and contractual skills. Not always an option.
Margin of safety	Ben Graham's famous margin needs to be enhanced when faced with uncertainty. Probably instinctively done by most decision-makers.

The most effective decision-makers under uncertainty are likely to possess special temperaments and work in organisations with special cultures, as tentatively highlighted in Table 2.

Table 2: Desirable culture and temperament for DMUU

Criteria	Comments
Temperament	As Hegel hints at, some people simply can't handle uncertainty. One needs low anxiety, patience, tolerance of ambiguity, and minimal concern about career risk.
Culture	Open to the flow of ideas and opportunities. Strategic thinking and behaviour. Encourage and know how to handle dissent. Actively seeking contrary views.
Bias to satisficing	Herbert Simon's notion of satisficing recognises our failure to be *homo economicus*. Optimising is inappropriate especially with radical uncertainty. Satisficing has a bias to quick and dirty, to the better rather than the best. Satisficing accepts that much of what we do is (hopefully) 'informed' muddling through. Some experimental evidence suggests that satisficers experience less regret than optimisers.
Diverse learning	Encourage 'trespassing' to learn from successful DMUU in non-investment areas such as in the military and political domains.

Voices, ideas, comments, criticisms

Participants were divided into two groups to debate and discuss DMUU both in general and in the context of specific questions relevant to today's investment decision-makers.

Differences between risk, uncertainty, and ignorance

The question: "are there meaningful differences between risk, uncertainty, and ignorance?" elicited broad agreement of the type "yes, but ..."

> "We like to operate in a world of risk, not uncertainty."
> WB3.0 participant

Perhaps, as one participant argued, the distinction is unnecessary as in reality we have only uncertainty, but we emphasise risk as the former appears less controllable, increasing anxiety and hindering effective decision-making. We like to live and operate in a world of risk, even after acknowledging its multifarious and sometimes misconstrued definitions. For better or worse risk provides a relatively *solid, reliable framework* for investment decision-making, albeit one that doesn't fully account for career and business risk or the fundamental risk of not meeting goals.

Intentionally the question didn't ask whether any differences are *useful* in investing. Although the importance of uncertainty has long been recognised it is far from being *operationalised*. As one participant keenly observed, "we're trying to squeeze uncertainty into risk." That's not surprising given the 60 year-old culture and practice of placing measurable risk such as volatility, beta, CVaR, probability of (permanent) loss of capital, ... at investing's core, so much so that some first allocate to risk rather than to return.

Investment clients can sense an intuitive distinction between the two that they and we find difficult to articulate. That makes effective communication and strong relationships crucial during periods of high uncertainty.

Table 1 above is an inchoate attempt to operationalise uncertainty, one that needs to be substantially enhanced through actual practice. A few of the more explicit techniques such as '(extra) margin of safety', 'partnering with complementary skills' and 'scenario playing' were frequently referred to in discussions.

Not surprisingly participants were wary of decision-makers who "were certain and had all of the answers", those who "blindly adopt conventional wisdom" and those who "blindly disregard it".

> "Intellectual arrogance is ignorance."
> "It's completely possible to be simultaneously confident and humble"
> WB3.0 participants

It is conceivable that any attempt to operationalise DMUU will, in practice, add little of substance. Some wondered whether the current emphasis on uncertainty is a result of the technology-driven flood of data rather than of strategic thinking. Because information is data with relevance and purpose, distinguishing signals from noise has become more critical in today's hyper-noisy environment. Heuristics in dealing with uncertainty might just help.

One intriguing question went unanswered: "has there ever been a (market) crisis with clear precedents?", the implication being that a search for precedents to future imagined events through *scenario playing* could reduce uncertainty and possibly generate unique investment opportunities.

In an informationally efficient market, the answer is 'no'. Had precedents been sufficiently clear, investors' appropriate trading would avert the crisis. In the real world, frictional forces impose limits to arbitrage so the question remained unanswered. The 'melt up' in late 1987 was offered as an instance but contemporaneous and later interviews reveal just how unclear were the supposed precedents and possible trading strategies.

A real case study involving ethical DMUU raised questions of trust and how best to communicate unpalatable information to investment committees and clients. Telling the truth and nothing but the truth is mandatory as should be telling it *immediately*, else later it becomes too difficult to backtrack. Whether the *whole* truth

should always be told is murkier and less certain. It can lead to conflict with and uncertainty about commercial confidentiality, as it does if short positions are revealed. There are thus uncertainties and limits even around openness and transparency.

Uncertainty around equity valuations

Not surprisingly there was a high degree of certainty amongst the group that US large cap valuations are at dangerous extremes, although extremes themselves create uncertainty as there are always arguments to rebuff the existence of extremes.

> "Is it contrarian to buy or to sell equities at the moment?" WB3.0 participant

Jeremy Siegel's[9] stance was noted. He justifies the current P/E by an appeal to low interest rates. Even discounting Siegel's eternal bullishness, a few lone participants noted there are valid arguments for current valuations supported by on-going strong earnings growth. In fact the US' global dominance, the shrinking of competition and a variety of challenges to Shiller's P/E support Siegel's view that current valuations represent "a new normal". As ever at extremes, hints of a "new paradigm" are rife even when lower longer-term real returns are a predictable consequence.

> "… but what do you do with your cash if you are not putting it into equities?" WB3.0 participant

One vigorously discussed issue was whether adviser funds could ever hold no equities (assuming all equities were at extremes). Arguments against included career and business risk and whether one can ever be sufficiently certain to justify that position. Holding some equities provides a *margin of safety* for both careers and businesses.[10]

Many noted that even within the US market there are sectors with reasonable, possibly even cheap, valuations. This is particularly the case for micro caps, about which there was little uncertainty among participants.[11]

General agreement held that emerging markets and Australia (with franking credits) and some pockets of Europe remain somewhat attractive. Interestingly some participants distinguished between what they saw as *uncertainty* in emerging markets but *risk* in developed markets. To an extent, issues of sovereign and political risk might justify this distinction.

Whatever the state of various markets, diversification broadly defined was seen as the primary tool for managing both risk and uncertainty. Harry Markowitz will be pleased. A wariness about valuations and concern about the absence of any margin of safety prevailed. Here's to you Ben Graham. Not surprisingly some participants were disposed to use the *delay* heuristic regarding changing their international equity allocations.

Overall the discussion was broadly supportive of value managers, long/ short equity strategies with less market beta and more dynamic shifting of gross and net exposures, holding greater levels of cash, and a wariness to consider new strategies in international equities, at least for the time being.

9 Jeremy Siegel is a Professor of Finance at the Wharton School of the University of Pennsylvania. He appears regularly on US networks such CNN, CNBC and NPR.

10 Some twenty years ago there were two 'balanced' Australian managers who held (almost) no equities with support from asset consultants. One went out of business, the other's business shrank dramatically.

11 Disclosure: Brookvine is engaged with and marketing Thomson Horstman & Bryant (THB), a specialist US-based micro cap manager.

Uncertainty around bond valuations

There was even less uncertainty that sovereign bond valuations are at dangerous extremes.

> "Are bonds risky today? To a 10 year investor they're not. To someone focused on the short term, or a manager seeking to beat the index, they almost certainly are."
>
> WB3.0 participant

At Brookvine's first Whiteboarding in 2015, the commonly held view was that bonds were at rock bottom. Yet yields have fallen further. The possibility of negative domestic interest rates, where investors pay the government to look after their money, may be a genuinely new paradigm. This led to a debate on the uncertainties of (sovereign) bonds *vs* term deposits (TDs). One view saw government bonds held to maturity as a form of insurance, matched by others' claim that TDs too are effectively 'insured' by the government and thus offer a relatively attractive risk premium.

Many participants are positioned for a correction (crash?) through investing in high-quality credit, maintaining low even negative duration and holding cash for its option value.

For some, the inflation/deflation dichotomy remains an unresolved uncertainty. The idea of (nominal) GDP bonds was raised. Some saw them as a natural way for governments to fund themselves while offering investors what they want: growth, inflation protection, and stability.[12]

Uncertainty around alternatives

The three major uncertainties around alternatives are:

1. Finding asset classes and strategies with genuinely low correlations to mainstream portfolios;
2. Finding managers who can deliver on expectations net of fees; and
3. Allocating sufficient capital to make a material difference to portfolios.

Both (1) and (3) require deep due diligence often in new areas of investing such as Catastrophe Bonds, Leasing, Farmland, Litigation Funding, or Intellectual Property and with unfamiliar managers. The considerable time, resources and skills required can often lead investors to *delay* (or *avoid*).

> "Risk of rejection runs high in Alts."
>
> WB3.0 participant

Some adopt the 'toe in the water' heuristic although minimal allocations have no observable benefits such as enhancing returns and/or limiting loss. Those participants who make effective use of alternatives reported having 15–20% exposure to them, including private equity and hedge funds. Some had as much as 35% in alternatives.

Costs are an eternal issue. For particularly cost-conscious investors liquid alt strategies (often invested by computer models using factors in place of fundamental analysis) have been used and can be seen as an application of and way of learning from 'Incremental Adapting'.

Among participants, the most commonly used heuristic was 'partner and/or co-invest with someone with complementary skills, experience and opportunities'. One participant wondered why there is a dearth of 'proxy decision-makers' (*aka* partners as in Table 1) available to private wealth investors, with the resources, skills, experience, and commitment to undertake the necessary due diligence on investments and operations. By comparison, institutional investors have a plethora of 'proxy decision-makers' from which to choose.

12 Shiller and others recently claimed to have solved the many practical objections to GDP Bonds.

Whether executed internally or by 'proxy', time is needed for due diligence, to craft an appropriate portfolio designed to meet objectives, to ensure meaningful alignment and to build trust. One participant spoke of a four-year programme to achieve that though around two years was seen as more typical.

The barrier of time and the need for patience is one of three common barriers to alternatives. A second barrier, problematic throughout our transactional industry, is the failure to adequately recognise and reward the skills required to properly assess alternative strategies even when eventually no investments are made. In general, there is little-to-no acknowledgement for decisions *not* taken which can, like saving goals in soccer, be profoundly valuable.

> "Alt strategies relying just on alpha can be fickle, so I want to be diversified across more strategies in alts than in mainstream asset classes."
> WB3.0 participant

A third barrier is the need for especially effective communication with boards and end clients. Aligned understanding hedges the phenomenon of suffering greater 'punishment' when alternatives disappoint than when equities, property or bonds do.

Those three barriers stand opposed to industry wisdom that to beat mainstream markets, strategies need to be different to it in meaningful ways.

It was suggested that including alternatives is sometimes done to garnish the portfolio with 'sizzle'. If so, when alternatives 'un-sizzle', as do all asset classes and strategies, boards and clients will be less forgiving in their disappointment.

The broad discussion around time, proxies, pessimism, regret, costs, alignments, … raised the possibility that some of the heuristics in Table 1 could be developed into useful tools for decision-making for alternatives.

Uncertainty around politics and ESG

Many participants felt that uncertainty around global and domestic politics, at least in the developed world, is noise to be largely ignored within portfolios even though clients do expect their investors and advisers to have considered views.

> "I have made just two good decisions around politics in 40 years of political analysis."
> WB3.0 participant

It is extremely difficult to hedge political uncertainty in portfolios as confirmed by the experiences of many Thematic Managers. Some argued that Brexit at least feels more like risk than uncertainty with two clear states of the world, the probabilities of which and whose different consequences can be 'reasonably' assessed. For UK investors, the 'MaxMin' heuristic might have some resonance.

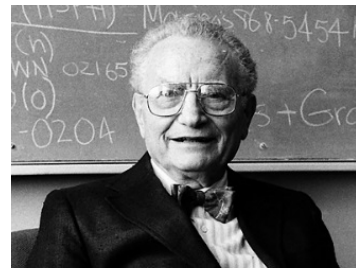
Trump (and the consequences thereof) is a clear and present case of how uncertainty induces discomfort as compared to the relative comfort of risk. His recent backflip on the Trans Pacific Partnership (TPP) underscores the challenge of DMUU for investors.

Collectively, participants seemed somewhat reluctant to talk about ESG and even more so about Impact Investing. To some (perhaps most) ESG raises serious issues to be accounted for in portfolios. Climate change and its consequences such as stranded assets take it out of the bounds of 'feel good' investing and increasingly clients expect actions to be reflected in their portfolios.

> "ESG is going to become bigger. It makes people feel better but few still want a stand-alone 'ethical' fund."
> WB3.0 participant

'G' is more a risk factor and a potential source of alpha. On the other hand, 'S', trying to account for social changes, is predominantly a case of uncertainty and ignorance. Some see it as noise, yet, as with politics, clients expect their investors to have considered views on all aspects of ESG.

A not-so-hypothetical about ignorance (radical uncertainty)



The Nobelist Paul Samuelson claimed that Jim Simons' Renaissance Technologies' Medallion Fund (reputedly returning 36% p.a. over the past 25 years) is…

"…perhaps the only long-time phenomenal risk-adjusted performer."

However, it is the ultimate Black Box. Aside from knowing it's a US equity hedge fund that relies on mathematical models, external investors (who are now few, if any, given the Fund has long been closed to all but partners) are told *nothing* about how it works. Its inner workings are *unknown* and *unknowable*. External investors remain in a *state of ignorance* about it.

Now … purely as a *hypothetical* … what if, as part of the deal for the US having a military base in Darwin, Malcom Turnbull convinced President Trump to get the co-CEO, Robert Mercer[13] (a long-time Trump supporter) to open the Medallion Fund to a few select Australian clients, with *zero fees*.

Past return data is available, and prospects can confirm it passes all formal due diligence hurdles on audits, compliance, reporting, filing, …. Warren Buffett, George Soros, and David Swensen are also investing in Medallion and the investment team has committed to stay for at least 5 years.

Questions were put to participants with responses recorded by a show of hands.

1. Would you recommend Medallion for (a) yourself, (b) clients?

   Responses: (a) Almost everyone would invest in Medallion for themselves;
   (b) Only about 1/3rd would recommend it to clients.

With two thirds of participants opting to *delay* (or *avoid*), the responses could suggest a level of agency cost, a misalignment that might deny clients of potentially large risk-adjusted returns. That likely stems from a natural desire, in the event of poor performance or worse (permanent loss of capital), to avoid admitting to ignorance arising from a lack of formal inquiry about the strategy's process to clients and committees. It might also reflect a higher standard of care in the face of uncertainty affecting clients.

That begs an important question. What level of first-hand insight and detail should an adviser have before recommending a strategy or product? A second question was asked.

2. Would your decisions change if Soros and Swensen assured you they understood the details of Medallion's investment process?

   Responses: Probably, was the response from most.

Interestingly, the assurances of Soros and Swensen appear to suffice for many, given that they are assumed to have deeper insights into the process than any local decision-makers would. Does then, the heuristic *complementary skills* bear enough weight when admisstion of ignorance could still be required if something goes wrong?

We don't know what the risk appetites of Buffett, Soros and Swensen as personal investors are. We don't know about their personal motivation in investing. But we suspect that, if it was known that the Yale University Endowment with Swensen as CIO, had made an allocation long ago, the pendulum may have swung even more towards a favourable client recommendation from the outset. Indeed, the calibre, stability and longevity of other aligned investor clients is a leading indicator many family office investors apply to vet investment opportunities.

13 Recently retired.

Conclusions

Participants felt the day's discussions increased their awareness of the differences between risk, uncertainty, and ignorance to the point of trying to 'use' some of the heuristics. Those specifically mentioned were: finding and working with appropriate partners, increasing the margin of safety beyond that for risk, trying to amplify weak signals, scenario playing, incremental adaptation and appropriate diversification often enhanced by alternatives.

Other issues that seemed to enlighten participants included the role of regret in decision-making and the need for influencers to meaningfully engage with stakeholders.

Afterword

All our thinking, decision-making and actions are heavily influenced by conventions, by what is broadly acceptable, by what has been done previously. Keynes called this latter behaviour – our extrapolating the past into the future – a 'convention'.

Brookvine's Whiteboarding initiative aims to remove the constraints of convention and legacy to allow genuinely fresh ideas and thinking to surface.[14]

The spirit of Whiteboarding comes from the idea that investors should periodically ask whether they would keep their current portfolio were they starting from scratch. Aside from exposing biases such as Endowment, Status Quo and Sunk-cost, embedded in all our portfolios, that question would encourage sustained focused thinking time, something we all struggle to do.

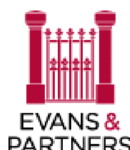
Our first Whiteboarding session focused on whether the usual basis for investing is totally appropriate for Australian funds, especially those of Family Offices and High Net Worth investors. The second followed on from that by focusing on the supposed and actual benefits of diversification. Our most recent session extended the underlying theme of the first two by focusing explicitly on decision-making under uncertainty. Participant feedback suggests that Whiteboarding does encourage thinking and discussion in a friendly and stimulating environment.

We are now onto thinking about suitable topics for Whiteboarding 4.0, to be held in 2019. We welcome suggestions.

14 The idea of starting from scratch has an ancient lineage in the history of ideas. In investing it was first suggested by George Soros in the 1970s and first implemented by David Swensen at the Yale Endowment in the 1980s. Our approach was further influenced by 'The Portfolio Whiteboard Project', produced by Cathleen Rittereiser in 2013.

With thanks to our participants

Whiteboarding 3.0 participants included representatives from the following organisations (in alphabetical order), as well as representatives from several family office and multi-family office organisations who wish to remain anonymous.



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Since its establishment in 2001 investors have committed over $13 billion to investment opportunities backed by Brookvine. Brookvine's investors include some of the largest superannuation and sovereign wealth funds in the world and many of the leading private wealth investment groups in Australasia.

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