

DECISION ECONOMICS

A behaviorally informed framework for investment decision-making

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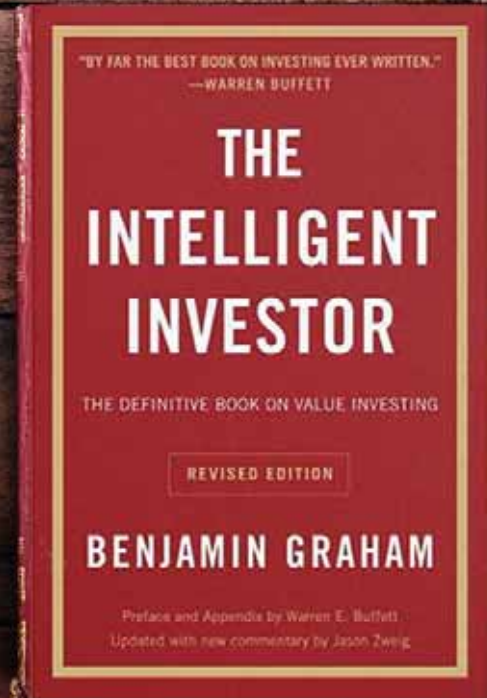


Is your process definable, defensible, and *repeatable*?

People tend to make decisions based on preferences, not probabilities






“ To invest successfully over a lifetime does not require a stratospheric IQ, unusual business insights, or inside information. What’s needed is a sound intellectual framework for making decisions and the ability to keep emotions from corroding that framework.”

–Warren Buffett,
Preface to *The Intelligent Investor*








Decision economics

Decision traps

Trial and error	Information overload	Pattern-seeking	Lazy thinking	Recall
<p>Issue: low conviction in process leads to “trial and error” implementation</p> 	<p>Issue: information sources distract more than inform</p> 	<p>Issue: inattention to market cycles can lead to performance chasing</p> 	<p>Issue: individual and group biases lead to fast and ‘lazy thinking’</p> 	<p>Issue: poor recall leads to a focus on ‘score carding’</p> 

Best practices

Be grounded	Be focused	Be disciplined	Be skeptical	Be thorough
<p>Create an investment “philosophy” statement</p> 	<p>Build a market dashboard to separate “signals” from “noise”</p> 	<p>Apply base rates to identify attractive entry points</p> 	<p>Employ counterintuition to address “groupthink” and ‘lazy thinking’</p> 	<p>Design a feedback loop to promote learning & process improvement</p> 

Decision trap – trial and error

Issue: low conviction in process leads to “trial and error” implementation

“ Whatever humans have learned had to be learned as a consequence only of trial and error experience. Humans have learned only through mistakes. ”

R. Buckminster Fuller
was an American architect,
systems theorist, author,
designer, inventor, and futurist



Decision trap – trial and error

Issue: low conviction in process leads to “trial and error” implementation



When cues and outcomes are stable, “trial and error” leads to optimization



Markets are governed by human behavior, not the Laws of Physics



When cues and outcomes are not stable, “trial and error” does not generate a learning curve

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Best practice – be grounded

Create an investment “philosophy” statement to build conviction in process

Define
Defend
Communicate



Crystalizing investment beliefs can build team cohesion and differentiate from competitors

What
do we
believe?

Why
do we
believe it?

Why
does it
matter?






Why is our
approach
better?

“
If you can’t explain it simply, you
don’t understand it well enough.”






–Albert Einstein

Decision economics

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Decision trap – information overload

Issue: information sources distract more than inform

“ What information consumes is rather obvious: it consumes the attention of its recipients.

Hence a wealth of information creates a poverty of attention. ”

Herbert Simon

Nobel Prize Winner in
Decision Theory



Decision trap – information overload

Issue: information sources distract more than inform



People tend to give too much weight to 'noise' or treat all data equally

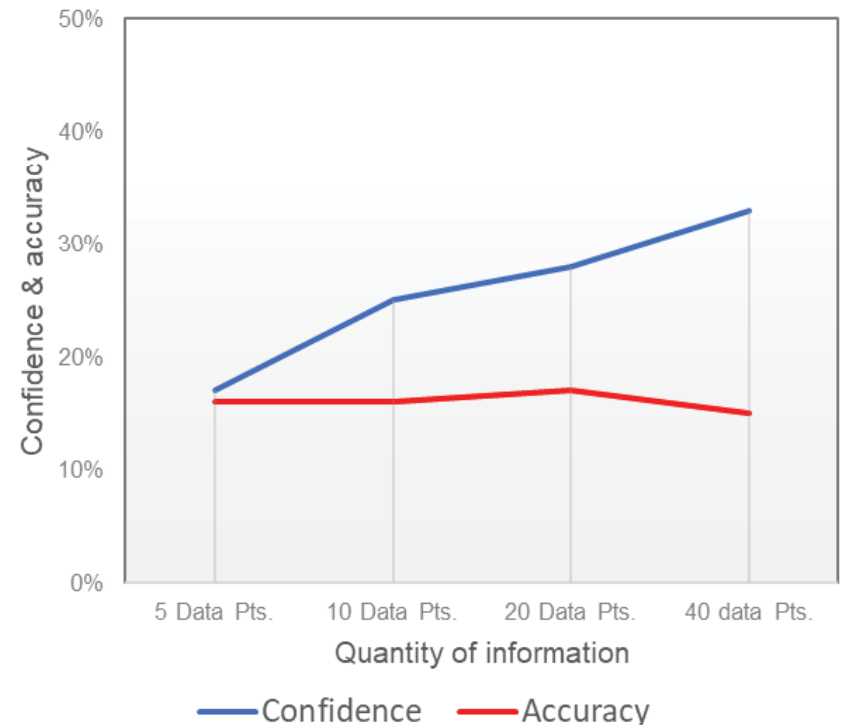


Too much information may lead to a tendency to employ heuristics (mental shortcuts)



Studies indicate a correlation between quantity of information and confidence

Horse race handicappers



Source: "Man As An Intuitive Statistician". Psychological Bulletin, Peterson, Cameron and Beach, Lee Roy. 1967. Simon, Herbert. 1978. "Rational Decision Making In Business Organizations". Nobel Memorial Lecture. James Montier, Behavioral Investing.

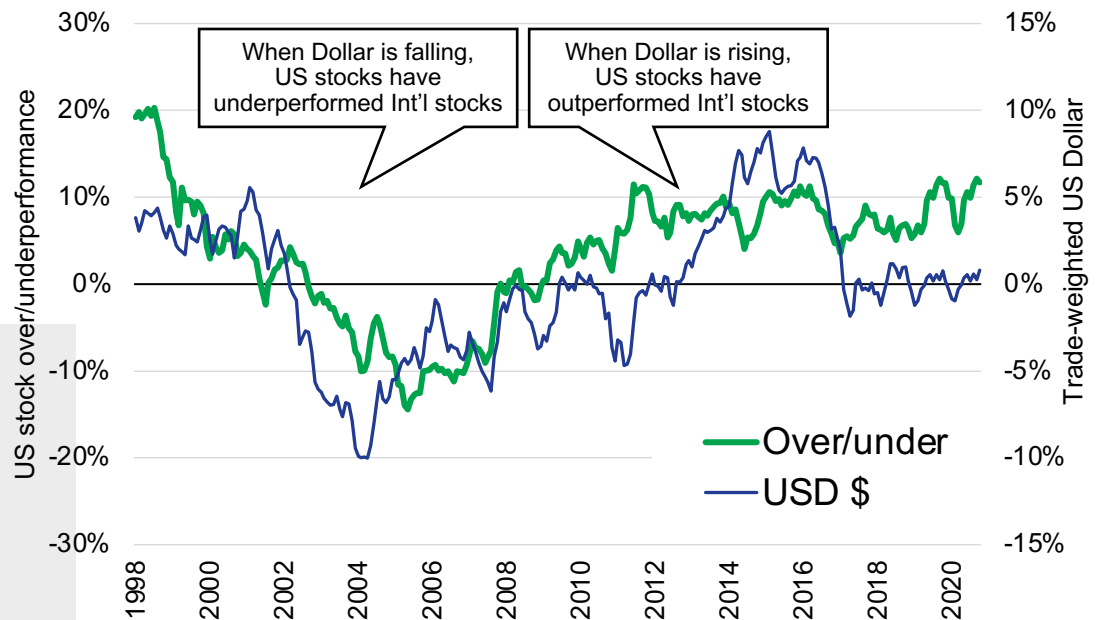
Best practice – be focused

Build a market dashboard to separate “signals” from “noise”

“
The art of being wise
is the art of knowing
what to overlook”
”

William James
American Philosopher






The impact of the dollar on relative performance of U.S. vs. int'l stocks








Source: Morningstar and Federal Reserve Board. USD\$ is based on the Trade Weighted U.S. Dollar Index: Major Currencies, Goods from the Board of Governors at the Federal Reserve Bank (US). US Stocks are based on the S&P 500 Index. Int'l Stocks are based on the MSCI EAFE Index. Performance is based on rolling three-year periods from Jan 1996 – Dec 2020. Over/Under is calculated by subtracting the rolling three year returns of US stocks from Int'l stocks. Past performance is not indicative of future results.

Decision economics

Decision traps

Trial and error	Information overload	Pattern-seeking	Lazy thinking	Recall
Issue: low conviction in process leads to “trial and error” implementation	Issue: information sources distract more than inform	Issue: inattention to market cycles can lead to performance chasing	Issue: individual and group biases lead to fast and ‘lazy thinking’	Issue: poor recall leads to a focus on ‘score carding’
				

Best practices

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Decision trap – pattern-seeking

Issue: inattention to market cycles can lead to performance chasing

“ Humans are pattern-seeking story-telling animals, and we are quite adept at telling stories about patterns, whether they exist or not. ”

Michael Shermer

Founder of The Skeptics Society - Coined the term "patternicity" in 2008



Decision trap – pattern-seeking

Issue: inattention to market cycles can lead to performance chasing

Equity Mutual Funds



Bond Mutual Funds



Patternicity: the tendency to find meaningful patterns in meaningless noise



The brain assumes cause and effect relationships and believes patterns will persist



Fear, greed and pattern-seeking can be a dangerous combination

1 Net new cash flow is reported as a percentage of previous month-end equity and bond mutual fund total net assets, plotted as a six-month moving average. The total return on equities is measured as the year-over-year percent change in the MSCI All Country World Daily Gross Total Return Index. The total return on bonds is measured as the year-over-year percent change in the FTSE US Broad Investment Grade Bond Index. Sources: Investment Company Institute, MSCI, FTSE Russell and Bloomberg.

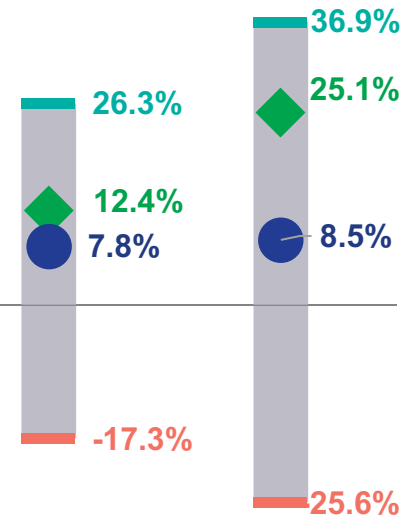
Best practice – be disciplined

Apply base rates to identify attractive entry points

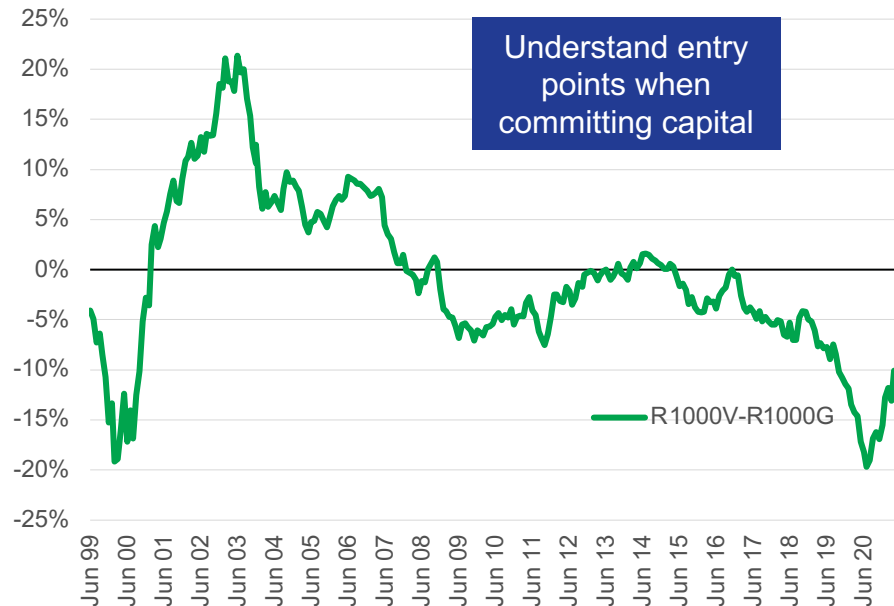
Framework of base rating



Value vs. Growth



Rolling 3-year periods – Value minus Growth








“ We don’t have to be smarter than the rest.
We have to be more disciplined than the rest ,”

Warren Buffett
CEO of Berkshire Hathaway






Source: Data from Morningstar. Performance for the Russell 1000 Value and Russell 1000 Growth indexes are based on rolling 3-year returns from Jul 1996 – Jun 2021. Return differential calculated by subtracting the Russell 1000 Growth index 3-year rolling return from the Russell 1000 Value index 3-year rolling return. **Past performance does not guarantee of future results.** 14

Decision economics

Decision traps

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Best practices

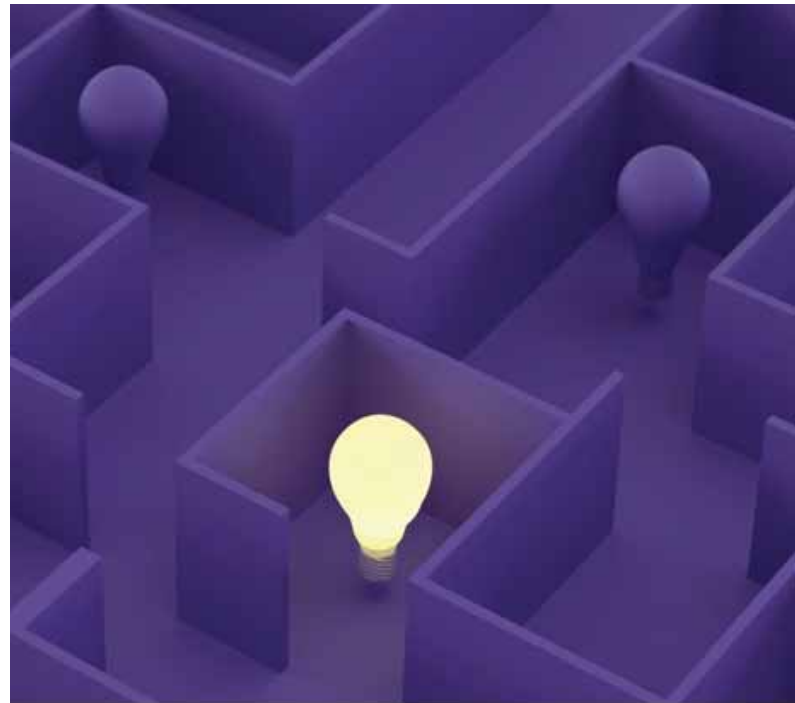
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Decision trap – lazy thinking

Issue: individual and group biases lead to fast and ‘lazy thinking’

Irving Janis, psychologist,
Yale University. Coined the
term “groupthink” in 1972

“The more cohesive the group, the greater the inner compulsion on the part of each member to avoid creating disunity, which inclines him to believe in the soundness of whatever proposals are promoted by the leader or by a majority of the group’s members.”



Decision trap – lazy thinking

Issue: individual and group biases lead to fast and ‘lazy thinking’



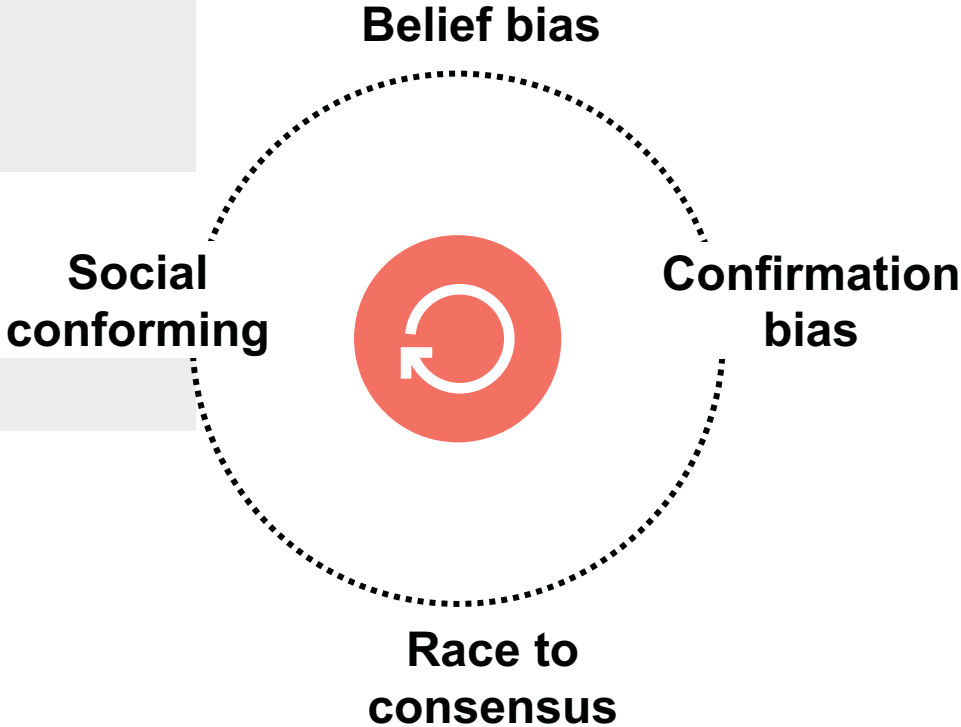
Biases are ever-present and difficult to overcome without structure



Groups may amplify (vs. mitigate) the behavioral biases of members



A common behavioral mistake is to confuse plausible with probable



Best practice – be skeptical

Employ counterintuition to address “groupthink” and ‘lazy thinking’

Structuring the Investment Policy Committee








- In group settings, de-correlate opinions to avoid groupthink
- Assign a devil’s advocate to explicitly seek out and present contrarian/outside points of view
- Build a bull, bear, and base case for major decisions
- Explicitly discuss what can go wrong with the chosen path and its implications
- Document critical aspects of the decision-making

“ Skepticism and pessimism aren’t synonymous. Skepticism calls for pessimism when optimism is excessive. But it also calls for optimism when pessimism is excessive. ”






Howard Marks
Co-founder of Oaktree
Capital Management

Decision economics

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Decision trap – recall

Issue: poor recall leads to a focus on “score carding”

“ People’s memories are not only the sum of all that they have done, but there is more to them: The memories are also the sum of what they have thought, what they have been told, what they believe. ”

Elizabeth Loftus, American cognitive psychologist and expert on human memory



Source: *American Psychologist*, November 2003 and *Memories of Things Unseen*, Elizabeth Loftus.

Decision trap – recall

Linking outcomes to decisions is critical for process improvement



Memories are subject to distortion including priming and hindsight bias



Separating luck from skill requires accurate recall of events and decisions



A good process is not dependent on luck and can be repeated over time

PROCESS

“Skill”

- ✓ Good process
- ✓ Good outcome

- ✓ Good process
- ✗ Bad outcome

- ✗ Bad process
- ✗ Bad outcome

“Luck”

- ✗ Bad process
- ✓ Good outcome

OUTCOME

Best practice – be thorough

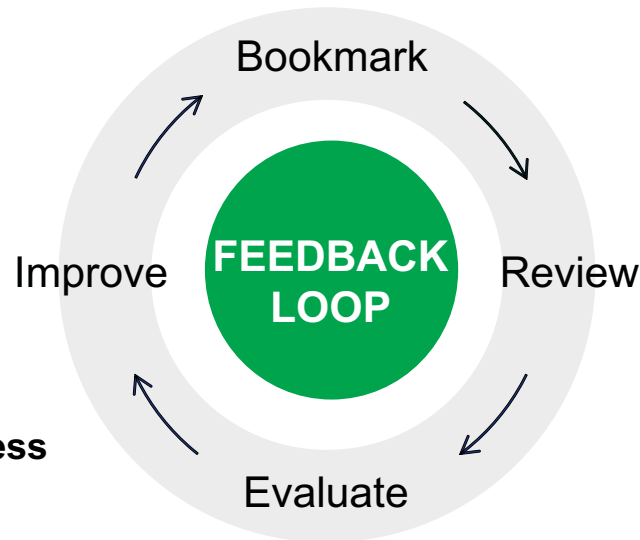
Design a **feedback loop** to promote learning and process improvement



You can't link outcomes to process based on results alone

1. Bookmark:
Recreate environment

2. Review:
Rationale for decisions



3. Evaluate:
Performance vs. benchmark

4. Improve:
Link outcomes to process

“ I think it's very important to have a feedback loop, where you're constantly thinking about what you've done and how you could be doing it better. ”

Elon Musk
Founder, CEO, SpaceX CEO, Tesla Founder

Putting it all together

Definable, defensible, and repeatable

Evaluate results and link to process. Identify areas to improve

Be grounded

Begin with investment “philosophy” statement

Be focused

Review B.O.Y. and E.O.Y. dashboard data

Be disciplined

Discuss base rating on asset classes and managers

Be skeptical

Review decisions from the Investment Policy Committee meeting

Be thorough

Evaluate results, link to process & identify areas to improve

“We are what we repeatedly do. Excellence, then, is not an act, but a habit.”

–Aristotle

Summary

Be grounded

Create an investment “philosophy” statement



Be focused

Build a market dashboard to separate “signals” from “noise”



Be disciplined

Apply base rates to identify attractive entry points



Be skeptical

Employ counterintuition to address groupthink and lazy thinking



Be thorough

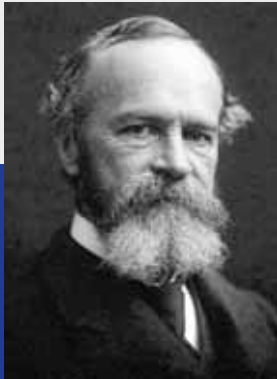
Design a feedback loop to promote learning and process improvement



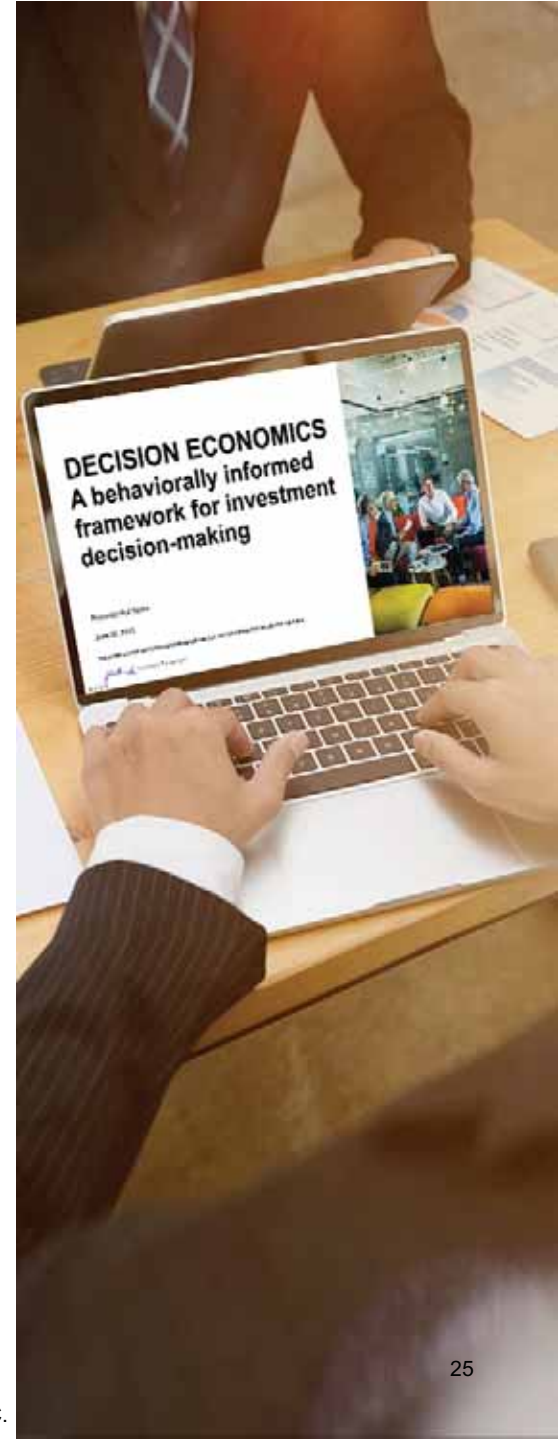
Decision economics

A behaviorally informed investment decision process

“ A new idea is first condemned as ridiculous and then dismissed as trivial, until finally, it becomes what everybody knows. ”



–William James (1842–1910),
considered the father of
modern psychology



Additional disclosures on indexes

The S&P 500 Index tracks the performance of 500 of the largest publicly traded companies in the United States. It is not possible to invest directly in an index.

The MSCI Europe, Australasia, and Far East (EAFE) Index tracks the performance of publicly traded large- and mid-cap stocks of companies in those regions. It is not possible to invest directly in an index.

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