



Decision Making for Pension Boards

How to make Good Decisions
to get Things Done

Alfred Slager
Martijn Vos

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FOR PENSION BOARDS**

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Foreword

Among different challenges facing those who manage assets for pension funds, the governance and the dynamics of decision-making are probably the most decisive for the pension fund long term success. While there is a wide and expanding range of literature and training programmes on financial topics such as market and interest rate risk management, portfolio construction, alternative asset classes, performance benchmarking and so on, there are currently very few manuals at disposal of governing boards to guide them in designing successful decision-making process. This book aims to help to fill this gap by providing clear and implementable guidance through some real-life examples that any board member – but also a CIO - would be able to recognize and put in practice.

In my roles of Chief Investment Officer for the Pension Fund of CERN and member of Investment Committee or Board member for other pension funds or organizations, I have experienced many situations and dilemmas discussed in this book. I will highlight a couple of them that address some of the most important and sometimes neglected risks for pension funds: over-reliance on models or advisors and mismatch between the governance structure and governance budget.

As discussed in Chapter 10, many pension fund boards use models to support their decision-making but the fact is that models will never be perfect. At the same time if the board explicitly acknowledges the limitation of the model and endorses that judgement is required, this may – although it may sound counterintuitive - greatly improve its decision process and the quality of the outcomes. Many decisions at the board level do actually call for judgement and this is precisely where a structured decision process is important. In the same context, articulating the roles of advisors and the scope of their inputs to the decision process, as suggested by the authors in Chapter 11, is of key importance to ensure the accountability both at the Board and at the CIO level.

Last but not least, the most important and impactful decision that any Board needs to make is to identify those decisions that should fall under its remit as well as those that could be delegated to the CIO and internal team. In some instances the board may want to make as much decisions as possible because board members perceive it as a way to stay in control. Independently of the underlying reasons, such arrangement would typically lead to suboptimal use of governance budget (time, resources and competence), with potential negative long-term impact on the fund performance. The authors make a compelling case for Boards to distinguish between strategic and operational decisions and assign the different types of decisions to those levels in the governance structure where there is adequate governance budget – i.e. time, resources and competence - for them to be managed.

In the current times of uncertainty with elevated geopolitical risks, forceful monetary tightening and unexpected financial vulnerabilities, it is particularly important for the Boards to identify and harvest all possible sources of *alpha*. My years of experience investing in a wide range of asset classes taught me that the investment alpha is scarce and very often difficult to access. Investment alpha can be very costly and its persistence is sometimes questionable. But there are fortunately other types of alpha that are more accessible and the governance alpha is definitely one of them. I believe that this work of Martijn Vos and Alfred Slager, where they put in practice their extensive hands-on experience and academic excellence, can greatly assist the Board in creating their own governance alpha.

Elena Manola-Bonthond, PhD, MBA, CAIA, Chief Investment Officer of the CERN Pension Fund

CHAPTER 1

Navigating to Better Decisions

The purpose of this book is to assist pension boards in improving their decision-making. Better decisions result in better outcomes for the plan's participants. We strongly believe that the decision-making process can and should be improved, since so much depends upon it. Pension boards oversee US\$ 48 trillion in investments, comparable to the combined Gross Domestic Product of the United States, China, Germany and Japan.¹ Spread out over thousands of different pension plans worldwide, the task of pension boards is above all to make decisions. "At any moment in any day, most executives are engaged in some aspect of decision-making: exchanging information, reviewing data, coming up with ideas, evaluating alternatives, implementing directives, following up."²

There is no doubt that a board member is capable of making decisions. Indeed, he or she probably has extensive experience doing so. However, we have observed over the years that the process for decisions is substantially different and being aware of this makes all the difference. Among other things, the choices a board makes span out for decades, rely strongly on complex models to make sense of all the choices and relationships and must be made

amid uncertainty about economies and financial markets. Plus, there is the board room dynamic to consider when actual decisions need to be made.

The importance of good decision-making for boards cannot be understated, especially when it comes to matters that directly impact the pension and financial well-being of participants long term. Industry insiders consider Canada Pension Plan a well-run fund, because their governance and decision-making has led to earning persistently good returns for their participants in recent years. The board of California based CalPERS pension fund showed inconsistent decision-making when they postponed rebalancing in 2008 and missed out on the recovery in the financial markets. It prompted the pension fund to evaluate and reestablish its governance and decision-making processes to get back into shape. In the Netherlands, the prescient Rabobank pension fund hedged equity and interest rate risk when others did not, deciding on what risks could derail the fund's goals rather than predicting markets, creating a windfall for their participants. Then again, there are also good decisions that were poorly executed.

These examples show that there is a big difference between decisions and their outcomes. Board members are expected to make more good than bad decisions on average, whether that means increasing pension pay outs, reducing fluctuations, or safeguarding the reputation of the pension organization as a safe place to entrust your money. After all, that's what they are paid for. Boards and

board members make decisions to make sure these assets are looked after, that pensions get paid, plan members are informed, the computer systems keep working, or to ensure that policy complies with laws and regulations. Decisions keep the pension industry going on a daily basis. Some of these decisions impact people's lives though when a board makes choices that its participants will only notice in decades to come when they retire, such as the level of promised pay outs. But short-term decisions can have a long-term impact too. When there are financial crises, boards must not only grasp what is happening in a short period of time, but also figure out if or where the ship is leaking and take emergency measures. And these are the decisions that hit the headlines.

To bridge the gap between pension premiums and a decent retirement income, pension funds typically invest the premiums in the financial markets. And this raises the challenge for good decision-making. Financial markets are continually in flux. The term market suggests a busy market of investors and information, buying and selling new and existing products, who during and after visiting the market, change their minds, and demand different prices. Products change, prices changes, and the motives of market participants as well - what can you base your decisions on as a decision-maker? How to interpret, use or ignore information today considering the long-term goals? If my pension fund delivers good investment results, is that the outcome of good decision-making or sheer luck and does this matter? Is the research and analysis that I'm

looking at the best one around, do I believe in the wisdom of crowds, or should I do my homework and collect information on my own?

This raises an equally important question: Having better information might help me make better decisions, but how does it help me achieve better results? Models surely help, in aggregating information from different sources. In recent years, much has been invested and developed to help boards in decision-making. Characteristic for pension boards is that they strongly depend on models in their decision-making. We easily counted more than 20 different models that a board typically uses. Which places today's boards at a great advantage. Information can be processed and analyzed to a degree that we've never seen before. But are we using these models effectively in decision-making, or do boards run the risk of getting confused at a higher level? At the same time, if models are not complementary, could an abundance of models not result in deterioration in decision-making?

Complicating things further, behavioral pitfalls exist when making decisions such as taking mental shortcuts to arrive at a conclusion, trying to avoid losses at all costs or being aware that how the problem is framed influences the decision. These behavioral insights are standard repertoire of board room dynamics. Boards are also used to work with quantitative analyses to decide. But whether for example models help avoid, worsen, or introduce new behavioral pitfalls, that remains an unexplored topic. And as far as we are aware of, boards are surely not trained enough on this topic and are

familiar with the pitfalls or how to deal with these, especially where model-supported decision-making is concerned. With so much depending on this, we need to take a fresh look at decision-making where pensions are concerned, sharing and summarizing research as well as best practices from working with boards.

We focus on pension funds and their financial decisions: the premiums, level of risk, investment decision on asset allocation to name a few. Investment and financial decisions are surprisingly similar all over the world, so we take a broad view, learning from boards in the major pension markets. We also make eager use of existing literature and insights, but only if it informs decision-making and helps improve it. There is excellent literature out there. We build on this and apply or adjust it for the specific challenges that pension boards have.

The book is organized around questions board members have raised, based on our experience of having worked with them. Over the years, these questions were discussed in lectures that we organized for pension boards, their advisors and policy makers in the pension sector, which helped shape our thinking on how to help boards make better decisions. That makes this book the product of 25 years of professional experience in the pension industry as well as at universities and business schools, continually bridging the gaps between theory and practice. Martijn Vos has a long history at advisory firm Ortec Finance, building and using advanced modelling to advise boards on a wide range of topics, from pension

design to investment mixes, climate change and risk management strategies. Alfred Slager has a long history using these models, starting as portfolio manager, and moving towards pension management as board member or in investment committees, doing research why it is important for a board to grasp main assumptions/beliefs behind these models. Based on our discussions and extensive experiences with boards, we observe that many boards are working hard to make good decisions, but also that there is a lot of room for improvement. So we organized this book around five themes that help improve decision-making in a practical way. We look at the available research, share experiences and case studies from funds, but more importantly, try to wrap up each topic in several practical take-aways that the board member can apply today, or at least use them within the board to reflect on the current state of decision-making. Wherever our views can be backed up by research, we gratefully acknowledge this, while other parts of the book are more inspired by day-to-day practice, are common sense and might need more research. Where relevant we provide references; in case of overlooked research and publications, the fault is our own and we would be happy to amend this.

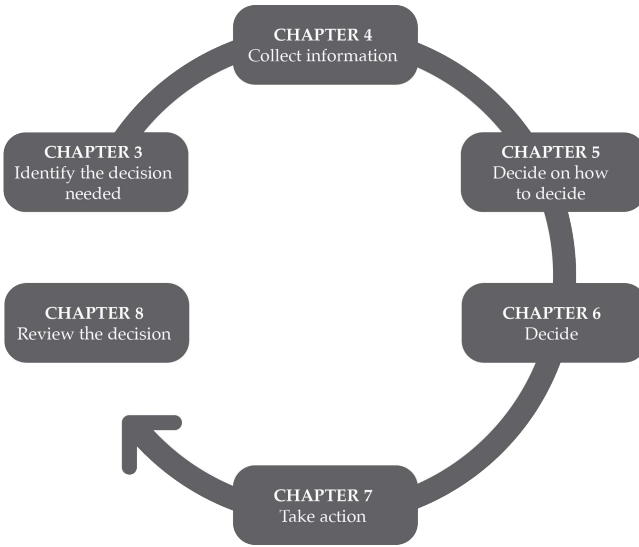
1.1 What to Expect in the Following Chapters

Part I provides the blueprint for decision-making - how does it work and how to organize it? Just being aware of the different steps, what their role is, and how they interconnect will give you an advantage in your decision challenges. Part II discusses how to advance the quality of decision-making, zooming in on the four biggest challenges (and opportunities) that boards deal with: biases, model complexity, sudden crises and, how to adapt, learn and really improve the quality of decisions.

Part I: Decision Making, Step by Step

Chapter 2 explores the relationship between decisions and "investment governance", the way pension organizations and investments are structured, and introduces the six steps of the decision-making process. This approach in Chapters 3 to 8 helps the board when preparing for or making a decision, and how to deal with the most common challenges. The first step is determining what the required decision should be in Chapter 3; Chapter 4 looks at the information you collect. Deciding on how to decide is the topic in Chapter 5. This is an easily neglected step but thinking this through beforehand can substantially improve the quality of the decision. Chapter 6 focuses on the actual decision itself and zooms in on questions about board room dynamics and the role of the chairperson. Chapter 7 turns to the implementation itself, how to monitor and improve the effectiveness of the anticipated outcome or impact of the decision.

Part I. Decision Making, Step by Step



Part II. Tools and How to Counter Potential Pitfalls

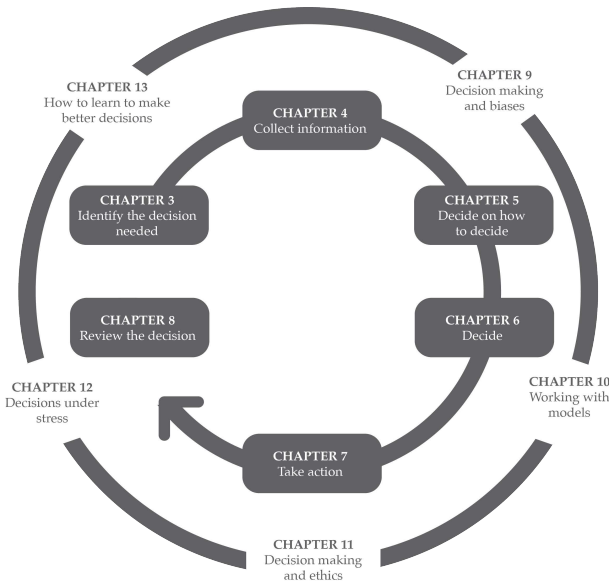


Figure 1.1 How the Chapters are organized.

Further Reading

If you want to read more about the topics, we have cited our sources and listed in this sector. We have used these books or discussed these more than once, and we think these are worth reading.

More on Statistics and Behavioral Biases.

- Stephen Ziliak and Deirdre McCloskey. 2007. *The Cult of Statistical Significance*. University of Michigan Press. They discuss how that statistical significance, though routine in economics, psychology, medicine, and increasingly in the courts, is nonsense when used alone.
- René Doff. 2020. *Behavioral Risk Management*. Risk Books: Infopro Digital. *The Added Value of Scenarios and Avoiding Biases*. Doff discusses the latest economic behavioral insights and applies them to day-to-day practice of managing risk. Although the perspective is risk management, it also aims at more robust decision-making procedures and coping with uncertainty.
- Gerd Gigerenzer. 2002. *Reckoning with Risk*. London: Penguin Books. This insightful book discusses how innumeracy hinders us and leads to wrong conclusions, because statistics can be presented in a confusing way. Gigerenzer shows how a different way of presenting data and reframing the solution approach, leads to better decisions.

More on Decision-Making under Stress

- Carmen M. Reinhart and Kenneth S. Rogoff. 2011. *This Time Is Different: Eight Centuries of Financial Folly*. Princeton University Press. Reinhart and Rogoff document that financial fallouts occur in clusters and strike with surprisingly consistent frequency, duration, and ferocity. They examine the patterns of currency crashes, high and hyperinflation, and government defaults on international and domestic debts, and find that these patterns recur.
- Cass R. Sunstein. *Worst-Case Scenarios*. 2007. Harvard University Press. Sunstein explores worst-case scenarios and how we might best prevent them, exploring our susceptibility to two opposite and unhelpful reactions: panic and utter neglect.

More on Decision-Making, Trade-Offs, Stakeholders

- Thomas Sowell. 1996. *Knowledge and Decisions*. New York: Basis Book. Sowell analyzes social and economic knowledge how it is transmitted through society, and how that transmission affects decision-making. While the book covers decision-making from a societal perspective, it emphasizes perspectives, like the element of trade-offs, that show up in different chapters throughout our own book.
- Arnold Mindell. *The Deep Democracy of Open Forums*. 2002. Hampton Roads Publishing Company. The book's goal is

bringing deeper awareness to group conflicts, helping create groups and organizations where everyone looks forward to group processes instead of fearing them. Mindell calls this the deep democracy of open forums, where all voices, thoughts, and feelings are aired freely, especially the ones nobody wants to hear.

More on Cultural Differences in Decision-Making

- Erin Meyers. 2014. *The Culture Map*. The book describes specific differences in how people from different cultures communicate and consider ideas at work. Meyer provides a field-tested model for decoding how cultural differences impact international business.
- More interesting material here to be found would be Geert Hofstede, Gert Jan Hofstede and Michael Minkov. 2010. *Cultures and Organizations: Software of the Mind: Intercultural Cooperation and its Importance for Survival*.

More on Learning and Adapting

- Philip Tetlock and Dan Gardner. 2015. *Superforecasting*. Random House Books. This book explores why some people have better foresights than experts and discusses how this can be trained in an effective way.

- Michael Mauboussin. 2013. *More Than You Know*. Columbia University Press. Mauboussin, covering investment philosophy, psychology of investing, innovation and competitive strategy, offers a multidisciplinary approach that pays close attention to process and the psychology of decision-making to increase the chances for long-term investment results.

More on Investment Management

- Jim Ware, Jim Dethmer, Jamie Ziegler, Fran Skinner. 2006. *High Performing Investment Teams: How to Achieve Best Practices of Top Firms*. Wiley. The authors' novel approach is not to consider the institutional investment organization like any other but look at the specific characteristics and what is needed to make it successful in the investment industry.
- Throughout the book, the investment model and investment process were used as a framework but not discussed in detail. This is explored in Kees Koedijk, Alfred Slager and Jaap van Dam. 2019. *Achieving Investment Excellence*. Wiley. This book details the roles, the tools and the strategies that make pension funds pay off, the role of pension funds and the fiduciary duty of trustees and explores how to improve investment quality of funds.

Notes

Chapter 1

1. 2022 Data for 22 major pension markets. Global Assets Pension Study. Thinking Ahead Institute, Willis Towers Watson. <https://www.thinkingaheadinstitute.org/research-papers/global-pension-assets-study-2023/>
2. Kenneth R. Brousseau, Michael J. Driver, Gary Hourihan and Rikard Larsson. 2006. The Seasoned Executive's Decision-Making Style. Harvard Business Review. February 2006. <https://hbr.org/2006/02/the-seasoned-executives-decision-making-style>

Chapter 2

1. Congressional Research Service. 2021. Worker Participation in Employer-Sponsored Pensions: Data in Brief. R43439. Updated November 23, 2021. <https://crsreports.congress.gov>
2. Adapted from John L. Maginn, Donald L. Tuttle, Dennis W. McLeavey, Jerald E. Pinto. 2007. Managing Investment Portfolios. A Dynamic Process. Wiley. Third Edition. See also Kees Koedijk, Alfred Slager and Jaap Van Dam. 2019. Achieving Investment Excellence. Wiley, p. 97.
3. Harold Koontz and Heinz Weihrich. 2015. Essentials of Management. McGraw Hill Education. 10th ed.
4. For an extended overview of the different decision-making models, you could visit the website of Jop Versteegt who has identified over 135 different decision-making models in his research project. See <https://www.jopversteegt.com/nedm-models.html>

Chapter 3

1. Selection of topics based on own review of minutes of a group of pension funds during 2021-22.

2 We are thankful to Paul de Ruijter for sharing this example.

3 See for example <https://simplystakeholders.com/stakeholder-mapping/>.

4 See Arnold Midell. 2002. The Deep Democracy Of Open Forums. Hampton Roads

Chapter 5

1. See <https://kfknowledgebank.kaplan.co.uk/maximax-maximin-and-minimax-regret->

Chapter 6

1. See Kees Koedijk, Alfred Slager, and Jaap Van Dam. 2019. Achieving Investment Excellence. Wiley. Chapter 13. Learning to Decide and Take Advice. Or Onno Bouwmeester. 2008. Advice as Argument. Amsterdam: Vrije Universiteit Available at

<https://research.vu.nl/ws/portalfiles/portal/42178896/title+page.pdf>

2. See Erin Meyer. 2014. The Culture Map. Public Affairs: New York

3. Aaron De Smet, Gregor Jost and Leigh Weiss. 2019. Three keys to better decision making. May 2019. McKinsey Quarterly.

4. Adapted from Robert C. Bordone and Daniel Doktori. 2021. Organizational Decision Making. Harvard Business Review. November 11, 2021.

5 We are thankful to Paul Loven for suggesting this concept.

Chapter 7

1. Aaron De Smet, Jost Gregor Jost and Leigh Weiss. 2019. Three keys to better decision making. May 2019. McKinsey Quarterly.

² Marcia W. Blenko and Michael C. Mankins. 2012. Measuring decision effectiveness. June 5, 2012. Bain & Company. Available at <https://www.bain.com/insights/measuring-decision-effectiveness/>

3. Attributed to Paul Samuelson rather than John Maynard Keynes: <https://quoteinvestigator.com/2011/07/22/keynes-change-mind/>

Chapter 8

1. Michael Mauboussin. 2007. More Than You Know. Finding Financial Wisdom in Unconventional Places. Columbia Business School Publishing.

2. Muralidhar, Arun. 2015. Attribution Hears a Who! The Case for Decision-Maker Based Attribution. *Journal of Performance Measurement*, Spring 2016, Available at SSRN: <https://ssrn.com/abstract=2705662>.

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1. Hugh Courtney, Dan Lovallo and Carmina Clarke. 2013. Deciding How to Decide. *Harvard Business Review*. November 2013. <https://hbr.org/2013/11/deciding-how-to-decide>

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3. See Statman (2019), p. 42.

4. See Ackert and Deaves, p. 365.
5. See Statman (2019), p. 72.
6. See Statman (2019), p. 37.
7. See Statman (2019), p. 26.
8. See Ackert and Deaves (2010), p. 362.
9. Compiled from Statman (2019), and Ackert and Deaves (2010). The clustering biases is based on Dan Lovallo and Olivier Sibony. 2010. A language to discuss biases. McKinsey Quarterly, March 2010.
10. See Statman (2019), p. 39.
11. See Statman (2019), p. 55.
12. See Ackert and Deaves (2010), p. 360.
13. See Ackert and Deaves (2010), p. 359.
14. Adam Grimes. 2019. The Law of Small Numbers: A Mistake you're Probably Making. February 28, 2019. <https://seekingalpha.com/article/4245091-law-of-small-numbers-mistake-probably-making>.
15. Harry Van Dalen, Kené Henkens, Kees Koedijk and Alfred Slager. 2012. Decision making by pension fund trustees in the face of demographic and economic shocks: a vignette study. *Journal of Pension Economics & Finance* 11(2), 183–201.
16. James Ware. 2008. *Applied Behavioral Finance: From Theory to Practice*. Focus Consulting Group.

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18. Theo Kocken has regularly advocated the use of pre-mortems. See for example . <https://pensioenpro.nl/pensioenpro/30018605/congres-beter-bestand-tegen-onzekerheid-met-ruimer-denkkader> (in Dutch)
19. Aaron De Smet, Gregor Jost and Leigh Weiss. 2019. Three keys to better decision making. May 2019. *McKinsey Quarterly*.
20. Sid Muralidhar and Arun Muralidhar. 2020. Behavioral Finance in Investing: The Existence and Importance of 'Investment Tribes' and Risk-Preference Diversity. *Journal of Investment Consulting*, Vol. 20, No. 1, 2020, pp. 48-60, available at SSRN: <https://ssrn.com/abstract=3753740>.

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2. Sherden, W. A., 1998. *The Fortune Sellers*, John Wiley & Sons, Inc., New York.
3. Adapted from McKinsey. 2008. *The Risk Revolution*. McKinsey Working Papers on Risk. Number 1, September 2008.
4. Gray, J. 1997. Overquantification. *Financial Analysts Journal*, 53, 5–12.
5. Kees Koedijk and Alfred Slager. 2011. *Investment Beliefs. A Positive Approach to Institutional Investing*. p.19-20. Palgrave MacMillan.
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Pension Fund Decision Making"). Tijdschrift voor Pensioenvraagstukken. TPV 2017/43, p. 14-18.

7. Adapted from Thomas Machielsen. 2015. CPB Asset Liability Management Model for Pension Analyses. CPB Background Document. September 2015.

8. Also known as the Base Rate Fallacy. See Ackert and Deaves, 2010.

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2. Steven Mintz. 2018. What are Values? Ethics Sage. Accessed on April 2023. <https://www.ethicssage.com/2018/08/what-are-values.html>.

3. Australian Institute of Company Directors, The Ethics Centre. 2019. Ethics in the Boardroom. A decision-making guide for directors. October 2019. <https://www.asx.com.au/documents/regulation/ethics-in-the-boardroom-aicd-october-2019.pdf>

⁴ See Erin Meyer. 2014. The Culture Map. Public Affairs: New York.

5. European Insurance and Occupational Pensions Authority. Prudent person principle. From DIRECTIVE 138/2009/EC (SOLVENCY II DIRECTIVE). Accessed on January 18th 2023. https://www.eiopa.europa.eu/rulebook/solvency-ii/article-2356_en

6. See for example Philip Boyle. 2017. Ethical Dilemmas and Decision Making. Municipal Association of South Carolina https://www.masc.sc/SiteCollectionDocuments/Land%20Use%20Planning/EthicalDilemmas_DecisionMaking.pdf

⁷ A typical line up of layers could be the: 1) Board - 2) CIO and his/her investment staff - 3) Fiduciary Manager - 4) Investment Manager. If there is a fund of fund (for alternative investments for example), then the next layer would be 5) The investment manager within the fund.

8. See for example Stephanie Mertens, Mario Herberz and Ulf J. Hahnel. 2021 The effectiveness of nudging: A meta-analysis of choice architecture interventions across behavioral domains. PNAS, Vol 111, No 1.

9. This framework for thinking ethically is the product of dialogue and debate at the Markkula Center for Applied Ethics at Santa Clara University. Primary contributors include Manuel Velasquez, Dennis Moberg, Michael J. Meyer, Thomas Shanks, Margaret R. McLean, David DeCosse, Claire André, Kirk O. Hanson, Irina Raicu, and Jonathan Kwan. It was last revised on November 5, 2021.

10. For further reading about USS Investment Management exclusion policy: June 19th 2020. https://www.uss.co.uk/news-and-views/latest-news/2020/07/06192020_further-reading-about-ussim-exclusion-policy

11. For further reading, see for example Arnold Mindell. 2002. Deep Democracy. Hampton Roads Publishing Company: Charlottesville, Virginia.

12. Source: The Markkula Center for Applied Ethics at Santa Clara University, Ethics in the Board Room.

13. Source: The Markkula Center for Applied Ethics at Santa Clara University, Ethics in the Board Room.

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2. Based on Slager, Alfred. 2021. Decision Making under Financial Stress, VBA Journaal, Zomer 2021, and Alfred Slager and Martijn Vos, Bestuurders in Crisistijd, working paper. <https://www.ortecfinance.com/en/about-ortec-finance/news-and-events/pension-board-decision-making-during-challenging-times>

3. See Slager, Alfred and Martijn Vos. 2020. Pension Board Decision Making During Stress Periods. Working Paper.

4. Broekema, W. G., C. J. A. van Eijk and R. Torenvlied. 2018. The role of external experts in crisis situations: a research synthesis of 114 post-crisis evaluation reports in the Netherlands. *International Journal Of Disaster Risk Reduction*, 31, 20-29. doi:10.1016/j.ijdr.2018.03.021

Chapter 13

¹ Canadian organization that collects detailed cost and performance data pension and sovereign wealth funds worldwide for benchmarking purposes. <https://www.cembenchmarking.com>

² See Argyris on single-loop and double-loop models in research on decision making. *Administrative Science Quarterly*, 21(3), 363–375, and Argyris, C. 1999. *On Organizational Learning*. Cambridge: Blackwell.

³ See A.P. de Geus. 1992. Modelling to predict or to learn? *European Journal of Operational Research* 59, 1-5

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5. For more information on the GRADE Method, see McMaster Grade Center, heigrade.mcmaster.ca For its application in investment management, see also Kees Koedijk, Alfred Slager and Jaap van Dam. 2019. *Achieving Investment Excellence*. Wiley: Chicester. Chapter 5.

About the Authors



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About the Authors



Martijn Vos holds a Master degree in Financial Econometrics, and has been responsible for providing advice and models for pension funds, insurers and sovereign wealth funds since 2006 as Managing Director of the Pensions & Insurance unit in Ortec Finance.

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