Moving Beyond Modern Portfolio Theory

Investing That Matters

Jon Lukomnik and James P. Hawley

"If you want to know what is next in finance and investing, read this book. Lukomnik and Hawley expertly show how financial theory got us here, the limitations of that theory and what is poised to take its place in the financial markets of the future."

— *Matt Orsagh*, Director of Capital Markets Policy, CFA Institute

"Lukomnik and Hawley provide an insightful case for the need to modernize Modern Portfolio Theory. Investors, academics, and everyone interested in finance and a sustainable future should read it – it will challenge how you think!"

— *Caroline Flammer*, Associate Professor, Boston University and Chair, PRI Academic Advisory Committee

"This definitive analysis of the limitations of Modern Portfolio Theory and the gaps it has left behind is a must-read for anyone wishing to understand where investment is now headed. It demonstrates why and how investment must evolve in coming years and is the foundation on which forward-thinking investors are now building a new practice."

— *Steve Lydenberg*, Founder and CEO, The Investment Integration Project

"Lukomnik and Hawley brilliantly make the point that Modern Portfolio Theory is limited in its ability to deal with systemic risks that affect capital markets, investors and society. They highlight the increasing realization that investing success is inextricably linked to the health of the economy and capital markets, rather than just to an investor's superior stock-picking prowess. They show clearly how investors have moved beyond diversification to act on climate change and other material ESG risks."

— *Sacha Sadan*, Director of Investment Stewardship, Legal and General Investment Management

"At a time of deep reflection around the purpose of companies and financial markets, *'Investing that Matters'* steers us towards a more enlightened view of capitalism in the 21st century. It teaches us that long-term value creation is achieved beyond simple analysis of a company's historical financial performance and encourages the reader to appreciate the importance of deeper systemic risks – ecological destruction, technological advancement and demographic shifts – which will shape the corporate governance landscape as we know it. Lukomnik and Hawley offer an important book, illuminating how modern portfolio theory needs to evolve to better serve our economies and societies now and into the future."

— *Kerrie Waring*, Chief Executive Officer, International Corporate Governance Network

"Moving Beyond Modern Portfolio Theory is a highly needed book, in which Jim and Jon realign finance with the real world, reminding us of its purpose.

I'm delighted we can now cite it and share it with students who feel a sense of confusion and distrust when they submit financial theories to their critical thinking, and with investors in search of a sense of purpose and impact. Portfolio and investing activity clearly affect the system – the financial, ecological, social world we live in. Jim and Jon make this argument very convincingly here, in a finance book that matters!"

— *Christel Dumas*, Associate Professor, ICHEC

"If you are puzzled by the current disconnect between the stock market and the real economy, but hopeful that investing can go back to its main purpose, that is allocating capital to address societal problems, you should read *Investing that Mattes*. An intelligent and accessible reflection on how Modern Portfolio Theory shaped the investing world we live today, and how it is now holding it back from addressing the challenges we face as a society. *Investing that Matters* suggests that practice is leading theory in experimenting with novel ways for investors to conceptualize and directly tackle systemic risk, through various forms of *Beta activism*. Still, our ability to theorize these practices is lagging. Calling for more active stewardship of investment to work on the root causes of risk, rather than playing with its statistical properties, the authors suggest the steps investors should take to take on this challenge."

— *Fabrizio Ferraro*, Professor and head of Strategic Management Department, IESE Business School

Moving Beyond Modern Portfolio Theory

Moving Beyond Modern Portfolio Theory: Investing That Matters tells the story of how Modern Portfolio Theory (MPT) revolutionized the investing world and the real economy, but is now showing its age. MPT has no mechanism to understand its impacts on the environmental, social, and financial systems, nor any tools for investors to mitigate the havoc that systemic risks can wreck on their portfolios. It is time for MPT to evolve.

The authors propose a new imperative to improve finance's ability to fulfil its twin main purposes: providing adequate returns to individuals and directing capital to where it is needed in the economy. They show how some of the largest investors in the world focus not on picking stocks, but on mitigating systemic risks, such as climate change and a lack of gender diversity, in order to improve the risk/return of the market as a whole, despite current theory saying that this should be impossible. "Moving beyond MPT" recognizes the complex relations between investing and the systems on which capital markets rely, "Investing that matters" embraces MPT's focus on diversification and risk adjusted return, but understands them in the context of the real economy and the total return needs of investors.

Whether an investor, an MBA student, a professor of finance or a sustainability professional, *Moving Beyond Modern Portfolio Theory: Investing That Matters* is thought-provoking and relevant. Its bold critique shows how the real world already is moving beyond investing orthodoxy.

Jon Lukomnik is the managing partner of Sinclair Capital LLC, a strategic consultancy to institutional investors, and a Senior Fellow at the High Meadows Institute.

James P. Hawley is Senior ESG Advisor, Truvalue Labs, a Factset Company. San Francisco, and Professor Emeritus School of Economics and Business, Saint Mary College of California.

Moving Beyond Modern Portfolio Theory

Investing That Matters

Jon Lukomnik and James P. Hawley

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2021
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge
52 Vanderbilt Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data
A catalog record has been requested for this book

ISBN: 978-0-367-36995-8 (hbk)
ISBN: 978-0-367-76082-3 (pbk)
ISBN: 978-0-429-35225-6 (ebk)

Typeset in Sabon
by Taylor & Francis Books

Contents

Figures

Contributors

Jon Lukomnik is the managing partner of Sinclair Capital LLC, a strategic consultancy to institutional investors, and a Senior Fellow at the High Meadows Institute. He was the Pembroke Visiting Professor at the Judge Business School at Cambridge for the winter 2020 semester. He has been the investment advisor or a trustee for more than $100 billion (including New York City's pension funds). He has overseen more than 80 studies examining the capital markets. He is a member of the Deloitte Audit Quality Advisory Committee, and a trustee on the Van Eck mutual funds and European UCITs and a former member of the Standing Advisory Group of the Public Company Accounting Oversight Board. Jon has been honored by the International Corporate Governance Network, the Council of Institutional Investors, Ethisphere, the National Association of Corporate Directors (US), Transparency Task Force (UK), and Global Proxy Watch. His book, *The New Capitalists* (2006), was a "pick of the year" by the *Financial Times*.

James P. Hawley is Senior ESG Advisor, Truvalue Labs, a Factset company, and Professor Emeritus School of Economics and Business, Saint Mary College of California. He is the author or co-author of two books, the first on international banks and the global monetary system, and also of the influential *The Rise of Fiduciary Capitalism* (2001). He was co-editor of *Corporate Governance Failures: The role of institutional investors in the global financial crisis* (2011), as well as of *The Cambridge Handbook of Institutional Investment and Fiduciary Duty* (2014), and *The Routledge Handbook of Responsible Investment* (2015). He is the author (or co-author) of numerous scholarly articles and papers. He has been an invited guest professor at the Université de Paris, Université de Montpellier, Maastricht, and St. Gallen University. He has been a guest scholar at the Judge University (Business School) at Cambridge University, UK, and at the Kennedy School, Hauser Center, Initiative for Responsible Investment, Harvard University. He has spoken at numerous professional investor conferences and is frequently quoted in business and other media.

Acknowledgments

The authors would like to thank the following individuals who contributed ideas, critiques, and inspiration for this book: Constanza Consolandi, Stephen Davis, Christel Dumas, Caroline Flammer, Keith Johnson, Oguzhan Karakas, Steve Lydenberg, Harinder Mann, Ellen Quigley, David Pitt-Watson, Paul Rissman, Delilah Rothenberg, Judy Samuelson, Lord Chris Smith, and Demosthenes Tambakis.

We would also like to thank the following institutions for encouraging our research: Judge Business School (Cambridge University), High Meadows Institute, Pembroke College (Cambridge University), Pensions Insurance Corporation, and TruValue Labs.

We dedicate this book to Diane, Rebecca, Jesse, and Satya, and to Lynn, Julia, and Aidan.

Introduction

In the following pages we tell the story of how one financial theory – a Nobel Prize-winning theory accepted by almost everyone – enriched the world in the twentieth century but promises to diminish it in the twenty-first. We argue that Modern Portfolio Theory (MPT) and the investing philosophies built around it are showing their age. It is time to evolve. Such evolution is essential in order to improve and make sustainable finance's ability to fulfill its twin main purposes: Providing adequate risk adjusted returns to investors and directing capital to where it is needed in the economy.

Why should anyone not involved in the finance industry care about a financial theory? Consider that the capital markets affect which businesses thrive and which are starved of capital. Whether coal-fired power plants are funded or whether capital flows to renewable energy projects. Whether businesses extract value from society or add to it. Whether you will be able to retire in comfort, or in squalor. Whether diversity is valued or marginalized in the economy.

We estimate that some $100 trillion in capital is professionally managed across the globe. And virtually all of these investments are managed according to MPT tenets. This historically unprecedented concentration of ownership and capital in the hands of large institutional asset managers is the backdrop of our book. It was powered by, and now empowers, MPT. How and why it has outlived its usefulness is what we argue. How practice has outrun theory even while asset managers pledge allegiance to MPT is an irony that we examine.

Harry Markowitz won the Nobel Prize for inventing MPT in 1952 for good reason. His insights into the nature of diversification changed investing. It allowed the creation of index funds, facilitated the growth of mutual funds, enabled 401(k) funds in the USA, ISAs in the UK, and myriad retirement and other savings funds around the world. Perhaps most importantly, he justified investors taking calculated risks on a portfolio-wide basis, thereby allowing capital to flow to new endeavors that benefitted the economy and society.

MPT says that you can diversify many risks by creating a portfolio of stocks rather than just holding a few and choosing them only on their individual risk profile, as was typically the case before MPT. But MPT also argues that you cannot escape the impact of systemic risk generated by the social, environmental, and financial systems on your investments. Rather, you just have to accept the resultant systematic market risk, or "beta", as investors call it. (Throughout this book we distinguish between systematic risk, which we define as non-diversifiable risk to investments, and systemic or system risk, which is the risk to or arising from, environmental, social, or financial systems. Systemic risks often create non-diversifiable systematic risk.)

Whether caused by economic distress or climate change, MPT claims that beta will impact your portfolio, but that you cannot affect beta. This is what we call "The MPT paradox," which lies at MPT's very heart. There are two major elements to the paradox. The first is that innumerable studies prove that systematic risk affects your investment return some ten times more than your skill in picking securities or constructing diversified portfolios. Hence the first part of the paradox: MPT tells us that what you can affect is what matters least. The second part is that MPT is wrong about systematic risk: Yes, systematic risk affects portfolios, but, contrary to MPT, portfolios and investing activity also affect systematic risk. It is a symbiotic relation.

We argue that, contrary to MPT's assertion, the risks and returns of "the market" are affected by investors' decisions. Feedback loops abound. Despite MPT's widespread adherence, we show how investors affect systematic risk, both intentionally and unintentionally. That, in turn, suggests that deliberately adding a systems focus to MPT can mitigate many of the causes of system risk that in turn are inputs into systematic market risk. Although sudden shocks to the financial markets certainly do occur (the Covid-19 pandemic is a striking case in point), these often preventable surprises are fewer than generally thought and result from a lack of understanding or a failure of will, not from an inability to prevent, or at least to mitigate, them. For example, pandemic threats have been well known and widely studied.

We report how the largest investors in the world are trying to mitigate systemic risks, from climate change to lack of gender, ethnic, and racial diversity to the growth of anti-microbial resistant bacteria. Their actions speak more loudly than the drone of MPT traditionalists denying their ability to do so. We want to shine a spotlight on what is hiding in plain sight: That the biggest investors in the world have in practice evolved beyond the limitations of current theory (which, ironically, the majority think that they still practice) in ways that fundamentally affect the economy, the environment, and the social conventions by which we all live.

To our knowledge, this is the first book to suggest that these real-world non-MPT actions form a coherent challenge to one of MPT's central tenets rather than being a series of isolated incidents. Many of these actions focus on systemic risk. The ability to mitigate systemic risk changes almost everything. It means that improving the overall market return is both more powerful than beating that market return through security selection and that it is necessary and possible to do so. It means that much of today's focus on relative performance is actually myopic, because focusing on system health (which cannot be benchmarked on a relative basis) over the long term will positively impact financial and economic returns more. And it portends a powerful new force in the fight against global warming, income inequality, gender, ethnic, and racial discrimination, and other systemic risks that threaten to depress returns, not to mention disrupt society.

MPT treats investing as a bloodless discipline, divorced from real-world messes like financial crises, income inequality, and global warming. By contrast, our approach understands that there are causal relationships and feedback loops between investments and the environmental, social, and financial systems on which the capital markets, and we as human beings, depend.

This is what we mean by our title and sub-title of the book. "Investing that matters," because investing is and should be linked to the twin purposes of investing, which is to allocate capital efficiently to the real non-financial economy and society and to provide a real and risk-controlled return to people, now and in the future. "Moving Beyond Modern Portfolio Theory," because MPT and much financial theory has lost track of its origins in and its actual links to the political economy in which it lives, and from which is sprung. Reuniting finance with the broader economy is vital for society, but critical also for finance itself. *Moving Beyond Mordern Portfolio Theory* ties all those threads together and suggests a conceptual frame to facilitate action. That is our motivation for this book.

1 The MPT Revolution Devours Its Children

The MPT Revolution Devours Its Children

Modern Portfolio Theory (MPT) changed the investing world and financial markets. It changed the world's economy. It was nothing less than a revolution. But, as French journalist Jacques Mallet du Pan observed at the time of the French Revolution, "Like Saturn, the revolution devours its children."

Du Pan's analogy fits. In the Greek myth to which he refers, Saturn – or Cronus in the original Greek – was the Titan who ruled the Earth for eons. Warned by prophecy that one of his six children will supplant him, Cronus attempted to swallow them all. However, Zeus survived and fulfilled the prophecy, defeating Cronus and the Titans, ushering in the golden age of the Olympian Gods.

MPT is the financial markets' Cronus, a powerful theoretical framing of how investing should work. It has been successful for generations. It has reassured investors who want certainty about complex market behavior, just as Cronus reassured the ancients about the workings of the complex world. But MPT has become old. It faces not just one threat to its dominance but three. First, it is a victim of its own success, much the way that Cronus's own fertility sowed the seeds of his downfall. Second, capital markets have changed in ways that Harry Markowitz, the father of MPT, could not have foreseen when he wrote his seminal paper in 1952. Capital markets have matured, as Zeus did, into a force that overwhelms some of the assumptions upon which MPT was built. Finally, just as Cronus was the ruler of a world built around the Titans but could not escape from his prophesied fate, so, too, MPT cannot escape from its origin as a way to diversify idiosyncratic risk and its inability to provide a framework for mitigating systematic risks. Indeed, MPT does not even try. That is a fateful error of omission. It laid the groundwork for multiple generations to view investing as somehow separate and apart from – and having no role in – mitigating risks to the financial, social, and environmental systems on which the capital markets rely. Thus, the MPT tradition fails doubly from errors of omission: first by ignoring that systematic risk can be influenced and mitigated; and second by ignoring the link between systematic risk and systemic (system) risk. (NB: Throughout this book, we use systematic risk to denote risks that originate from the same source and affect a broad swath of securities. We use systemic risk for risks to the