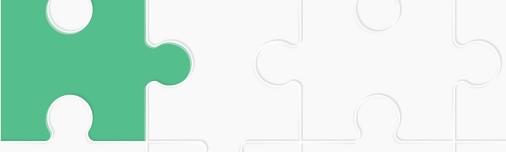
LUKASZ POMORSKI

THE PUZZLE OF SUSTAINABLE INVESTMENT

WHAT SMART INVESTORS
SHOULD KNOW



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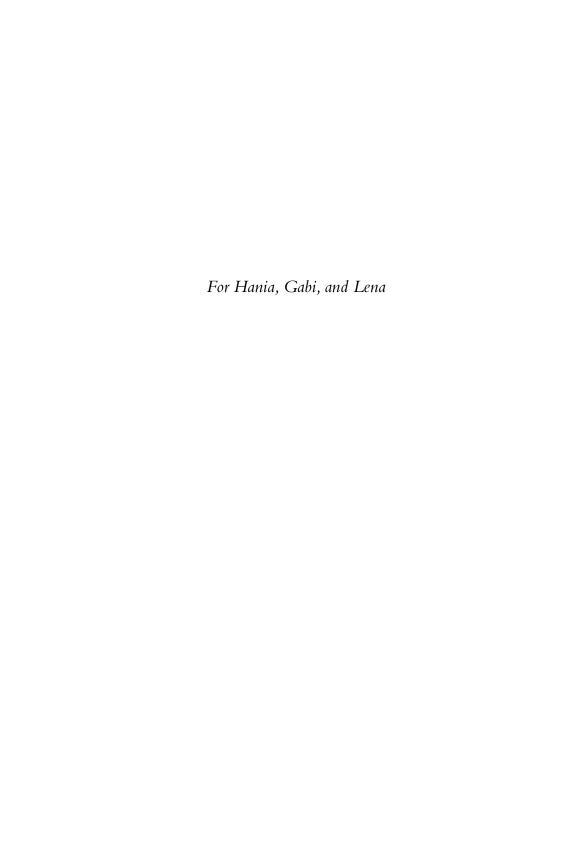
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the names of Michael Cappucci, Mark Carhart, Mike Chen, Harun Dogo, Peter Easton, Gifford Fong, Dave Larcker, Christian Leuz, Lubos Pastor, Don Raymond, Michael Simonetti, Johannes Stroebel, Bryan Tayan, and Jing Zhang, all of whom were partners or instigators of major ESG projects and whose views changed the way I think about sustainable investments.

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Chapter 1

Introduction

ver the past decade or so, sustainable investing went from a niche, little-known strategy to one of the hottest trends in the financial markets. The interest in this space led to trillions of dollars invested today in strategies managed with environmental, social, and governance (ESG)-related portfolio goals, or at least leveraging some of the information that warrants the "ESG" or the "sustainable" label. At the same time, sustainable investing has earned itself many critics who are deeply skeptical about its foundations and claims. Some of the opponents are forceful enough to argue for anti-ESG investing regulations, and such laws indeed get passed, notably by some US states.

You might hope that these conflicting ideas may be reconciled through a vigorous debate, but that seems unlikely. If anything, the views on sustainable investing are getting increasingly polarized and politicized. The proponents claim that this is the only reasonable way to invest, or a critical ingredient in achieving major environmental or social goals. The opponents denounce sustainable investing as an anti-capitalist plot that reduces investors' returns and maybe even harms the overall economy. Both these extremes are at least partly wrong.

Part of the problem is that commentators do not even agree on what the basic concepts mean and end up talking past each other. Sadly, this is not only the case between the two sides but also within them. For example, the proponents often meaningfully disagree about what constitutes sustainable investing and what does not. You may have noticed that in the first paragraph, I vaguely pointed to the "trillions of dollars" invested in this space. This is because the assessments, all from otherwise reputable sources, can range from \$3 trillion. As you will see shortly, I do not care for hyper-specific definitions of "ESG" or "sustainable" investing (I will use these

labels interchangeably throughout the book), but if a simple count of the assets involved can differ by a factor of 10, then we should expect even larger disagreements about more complex questions.

Another issue is that much of the commentary about ESG investing often reflects rather superficial analyses and sometimes outright muddled thinking. Again, this affects both sides of the debate. For example, both sides overstate the potential of using financial portfolios to influence corporate decisions. The pro-ESG crowd is banking on a large effect (and worries about greenwashing), the anti-ESG crowd fears it. If they thought carefully about the channels through which such impact might arise, perhaps we'd see less emotion and lower volumes in this conversation. The same holds for many other hotly debated questions, from the impact of ESG on portfolio returns, to the interpretation of ESG data, to what ESG even means once we go beyond investing in stocks and bonds. Ironically, many of these questions lend themselves to fairly straightforward economic analysis and can be addressed with clear and, in my view, persuasive economic intuition. Again, if we spent just a bit of time objectively thinking about these issues, we would likely end up much closer together than we are today.

I know that's a bold statement. If you are reading this book, you likely already know how heated the debate is, and you may be understandably skeptical about any conceivable consensus. Then again, consider that even the red states in the United States sometimes adopt ESG strategies. For example, in May 2023, the Florida State Board of Administration allocated \$200 million to a fund focusing on clean energy and green transition; in September 2023, the Board announced that it committed to another renewable technology fund. To put this in context, Florida passed a bill banning ESG investments by public funds; the governor of the state, who vocally supported

the bill, is one of the Board's trustees. On the one hand, the Board made it clear that the investments were made strictly on the risk and return basis; on the other, most people would likely consider these new mandates ESG- or at least E-related. At the same time, some of the proponents of ESG investing are increasingly focusing on portfolio outcomes, not just on, say, how their portfolio may contribute to the global causes they care about. For example, in late 2022, the Oregon Public Employee Retirement Fund made a commitment to decarbonize their investment portfolio, which is a classic sustainable investing move. But when the State Treasurer made the pledge, he was very clear that it was solely based on financial considerations, notably climate risk that may affect the portfolio. The Treasurer added that the Fund's "investment decisions must be driven by financial considerations and investment returns, not politics."3 So, perhaps there is a more balanced way to think about sustainable investing after all.

Which is precisely why I wrote this book. I believe that we have enough tools, frameworks, and economic intuition to allow a balanced analysis of this field and to see past the hot takes we often see in the media. We just need to accept that the answer to some of the critical questions will be the dreaded "it depends." I will try to make it up to the readers and at least explain what it depends on and how to assess which way a tradeoff may tilt in different environments and situations. As we do so, we will go over multiple case studies from investment practice. Moreover, I will strive to make the discussion as intuitive as possible and to avoid any technicalities and equations. Any interested reader with a basic grasp of economics will be able to follow the arguments. That's important, because you really can untangle most of the key disagreements in sustainable investing without resorting to esoteric arguments or combing through pages of mathematics. (In fairness, you may need them to translate the basic

intuition into specific investment recommendations or policy advice, but do let's start with the basics first.)

This book reflects my years of experience designing and overseeing sustainable portfolios. I have had the privilege of working with investors who have a wide range of views on sustainability and often very different needs for their investment portfolios. What a blue state public pension may call "sustainable" can be dramatically different from what an endowment needs, let alone from the preferred approach for a Middle Eastern sovereign wealth fund. I've worked with plenty of institutions who were deeply skeptical and needed clear evidence that the only way ESG enters into their portfolio is non-concessionary: their positioning may reflect some ESG information, but only when it improves the purely financial investment view. These experiences taught me some humility and convinced me that there really are no silver bullets here. I intend to convey this in this book (well, at least the latter point).

In addition, I have been actively involved with and participated in working groups of multiple sustainable investor organizations, such as the PRI (Principles for Responsible Investment). This gave me a chance to work with other stakeholders, including other portfolio managers but also dedicated sustainability specialists who may not have an investment role, consultants, and, notably, ESG data vendors. This book will reflect what I learned not only through due diligence and rigorous testing, but also practical applications of such data.

Finally, and very importantly, I have translated my research and portfolio management experience into an ESG investing course that I have initially taught at Yale and, more recently, at Columbia University. The students are my "clients in the classroom" and are as important to me as the asset owners I may serve in my position within the financial services industry. Throughout the years, I refined my arguments. I had to, to be able to reach not

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just business or economics majors, but also the many public policy, sustainability sciences, climate, or forestry students who have been gracious enough to enroll in my course. I will apply these lessons in this book, which again aims at the broader audience, not just the specialists who already have ample investing or sustainability experience. (Even if I do believe that the specialists will learn something interesting from me, and I will help them by highlighting the parts of the book that they can safely skip.) And, just as in the classroom, I will be frank about the many tradeoffs and some outright shortcomings of sustainable investing. It is a fascinating and important field, but clearly not a panacea for all your investment and environmental and social needs.

What can you expect from this book? We will put ourselves in the position of an investor. This investor may well have sophisticated sustainability views and requirements, but we will focus strictly on how they map to the resulting investment portfolio. This means that many fascinating questions fall outside the scope of this book. For example, we will not debate policy. We won't ask whether a carbon tax is a good way to deal with global warming, although we will discuss how firms and security prices may react to a carbon tax if and when it is passed. Similarly, I will not try to explain how greenhouse gas emissions affect global temperature and lead to a host of other environmental and, eventually, also social effects. You and I may even disagree about this—which is completely fine as long as we both acknowledge that there are many investors who have a strong view on this question. And we will discuss how, given this view, such investors build their investment portfolios or how they may or may not be able to use their investments to influence the emissions of their portfolio companies.

We will begin with the single most frequently asked question in sustainable investing: does ESG help or hurt investment returns? One of my coauthors and former colleagues delights in

answering this question with an emphatic "yes." And he's right. The question is ill-posed. To be able to address it, we first need to explain how investors actually incorporate ESG information in their portfolios and what financial and nonfinancial goals they want to express through their investments. We will see some of the key tradeoffs here and, importantly, will learn how to assess them in practice.

In Chapter 3, we will discuss how ESG information affects security prices. Our gut feeling may be that at least some environmental or social, let alone governance, characteristics should influence how much a company is worth. We will strengthen this intuition by discussing why that happens and through what specific channels this information impounds security prices. Importantly, we will also discuss markets in transition, thinking about the shifts in pricing when markets become more aware of ESG information, and maybe even push the prices further still to reflect the changing investor preferences. We will discuss how this affects the relationship between ESG and future expected returns, sometimes in ways that are counterintuitive at first, but are vitally important for investors building realistic investment views.

Chapters 2 and 3 will be relatively general in that the frameworks we will introduce hold for many different ESG issues, for different asset classes, etc. In these chapters, I will refer to some generic "ESG scores" without defining them further, other than in the specific investment case studies we will discuss. This changes in Chapter 4, which is all about ESG data. We will discuss the most obvious category of this data: ESG ratings that investors source from third-party providers. While some commentators are deeply skeptical about ESG ratings, I do believe they have important benefits for investors, even if these are not the obvious ones (such as predicting future returns). We will also talk about measuring specific issues within sustainability (for example, measuring a company's greenhouse gas emissions,