

## Preface

The aftermath of the Covid-19 pandemic, geopolitical tensions and the resurgence of inflation have been primary drivers of the economic environment and financial markets. In most countries, the extraordinary monetary policy measures that have shaped financial markets over the past 15 years are being phased out. The normalisation of monetary policy has brought new challenges, as certain parts of the financial sector and the real economy appear vulnerable to the rapid increases in yields and the decompression of risk premia. Adding to these unprecedented challenges are financial innovations, technological developments – such as artificial intelligence – and the urgent need for public investors to support the transition to a sustainable economy.

Given this environment, public investors are faced with several “known unknowns”, compelling them to re-evaluate their governance and risk management processes.

To foster the debate about these challenges, the Bank for International Settlements and the World Bank – jointly with the Bank of Canada and the Bank of Italy – organised the Eighth Public Investors Conference in late 2022. The conference, originally planned in 2020 and postponed due to the pandemic, was held at the headquarters of the Bank of Canada in Ottawa on 27–28 October 2022 and gathered participants from 35 public and private institutions belonging to 26 different countries. The conference aimed to promote the exchange of innovative ideas among practitioners and academics, knowledge-sharing and collaboration across organisations, and the development and dissemination of best practices in the management of financial resources by the public sector.

The proceedings published in this book cover most of the papers presented at the event, including some of the most current research and ideas on public asset management. This publication aims to provide valuable insights for asset owners, academics and researchers, regulatory and oversight bodies, investment consultants and, notably, central bankers.

The book is organised into three parts, each reflecting the major topics debated:

- Part 1 focuses on public investment management, taking into account a number of issues that currently shape the investment process of central banks and other public institutions. The first chapter investigates the impact of governance arrangements on investment policies for central bank foreign exchange reserve portfolios. The second chapter presents a balance sheet model aimed at providing central bankers with a comprehensive framework for asset allocation. The model allows for the comparison of financial risks with existing financial buffers, considering different scenarios, geopolitical risks and economic uncertainty. The third chapter introduces the potential trade-off between sustainability and financial returns by analysing the historical performance of green bonds.
- As climate risk and sustainability are becoming key factors in the investment process of public investors, Part 2 is dedicated entirely to such issues. The first chapter examines abnormal flows into green exchange-traded funds as a possible indicator of market-wide changes in investor appetite for environmental responsibility. The second chapter

investigates the existence of a carbon risk premium in the corporate bond market, driven by investor preferences for environmentally responsible firms and the perceived credit risks associated with more carbon-intensive firms. The third chapter expands on the Network for Greening the Financial System climate scenario framework to estimate expected returns under climate scenarios for fixed income portfolios. The fourth chapter incorporates sustainability considerations into sovereign and corporate bond investments.

- Finally, Part 3 addresses topics related to quantitative portfolio management. The first chapter constructs and analyses active systematic investment strategies for sovereign fixed income investors based on carry and term premia. The second chapter introduces a novel statistical procedure for backtesting well known risk measures such as value-at-risk and expected shortfall. The third chapter applies machine learning techniques to the active management of bond portfolios. The fourth chapter emphasises the importance of the information contained in the tails of return distributions for portfolio management purposes.

This book would not have been possible without the contributions, first and foremost, of the presenters at the Eighth Public Investors Conference. The editors are grateful for their permission to publish their original work in this volume. We also wish to acknowledge the hospitality of the Bank of Canada and the funding provided by all sponsoring institutions to make the conference possible. We extend our thanks to the numerous participants, reviewers and staff from multiple institutions whose insightful comments and efforts contributed greatly to the preparation of this book, including Nicola Faessler and Margarita Sanchez.

Ottawa, Canada	Nicolas Audet
Washington, DC	Eric Bouyé
Basel, Switzerland	Ingo Fender
Rome, Italy	Patrizia Ferrauto
Washington, DC	Carmen Herrero Montes
Ottawa, Canada	Etienne Lessard
Rome, Italy	Simone Letta
Basel, Switzerland	Mike McMorrow
Rome, Italy	Tommaso Perez
Washington, DC	Daniel Vela Barón
Basel, Switzerland	Omar Zulaica