

Agentic Intelligence

AI Methods for Bond Markets

What does it mean for an AI system to be agentic? answers this through modeling one of modern finance's hardest problems: Government bond market trading. As structural pressures and regulatory concerns mount, traditional approaches fail in these complex, partially observable and bilateral trading environments.

Following unprecedented pandemic-era government debt issuance, authorities including the Reserve Bank of Australia, Bank of Canada, Bank of England, and Federal Reserve Bank of New York have prioritised enhancing the market's liquidity and functioning. This book responds directly by building Agentic AI models – showing that Agent-Based Models (ABMs) provide the natural computational foundation for transparent market modelling, and that when LLMs are embedded with discipline, Agentic AI can uncover emergent features and behavioural realism that traditional models cannot. Dynamically adaptive and able to operate over a virtually infinite space of possibilities, Agentic AI offers a new paradigm.

The author makes three practical contributions: (1) a liquidity-centred framework that treats the ability to transact as the central systemic object; (2) Agentic AI methods that capture heterogeneous participant interaction, non-linear cost structures, and emergent liquidity; and (3) the AI-simulator testing paradigm, in which the simulator is the laboratory and the agent is the experiment – providing market participants and regulators a basis on which Agentic AI can be deployed, governed, and trusted. Readers will gain implementable methodologies for moving Agentic AI from concept to market application, supporting trustworthy AI in the trading, supervision and design of financial markets.

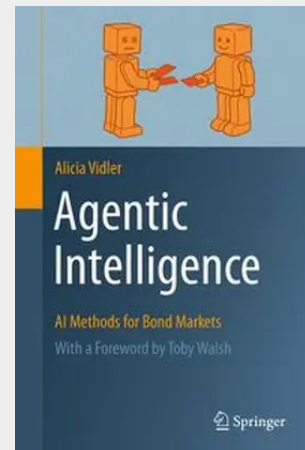
Frank Fabozzi, Professor of Practice at Johns Hopkins Carey Business School, Author of the best-selling

David Rensin, Distinguished Engineer; Technical Advisor to the CFO at Google

Dr. Belinda Middleweek, Senior Lecturer, University of Technology Sydney

Daniele Grassi, CEO & Co-Founder Axyon AI

What does it mean for an AI system to be agentic? Agentic Intelligence: AI Methods for Bond Markets answers this through modeling one of modern finance's hardest problems: Government bond market trading. As structural pressures and regulatory concerns mount, traditional approaches fail in these complex, partially observable and bilateral trading environments. Following unprecedented pandemic-era government debt issuance, authorities including the Reserve Bank of Australia, Bank of Canada, Bank of England, and Federal Reserve Bank of New York have prioritised enhancing the market's liquidity and functioning. This book responds directly by building Agentic AI models – showing that Agent-Based Models (ABMs) provide the natural computational foundation for transparent market modelling, and that when LLMs are embedded with discipline, Agentic AI can uncover emergent features and behavioural realism that traditional models cannot. Dynamically adaptive and able to operate over a virtually infinite space of possibilities, Agentic AI offers a new paradigm. The author makes three practical contributions: (1) a liquidity-centred framework that treats the ability to transact as the central systemic object; (2) Agentic AI methods that capture heterogeneous participant interaction, non-linear cost structures, and emergent liquidity; and (3) the AI-simulator testing paradigm, in which the simulator is the laboratory and the agent is the experiment – providing market participants and regulators a basis on which Agentic AI can be deployed, governed, and trusted. Readers will gain implementable methodologies for moving Agentic AI from concept to market application, supporting trustworthy AI in the trading, supervision and design of financial markets. I have spent five decades writing



74,89 €

69,99 € (zzgl. MwSt.)

vorbestellbar, Erscheinungstermin ca. November 2026

Artikelnummer: 9783032305954

Medium: Buch

ISBN: 978-3-032-30595-4

Verlag: Springer

Erscheinungstermin: 13.11.2026

Sprache(n): Englisch

Auflage: Erscheinungsjahr 2026

Produktform: Gebunden

Seiten: 238

Format (B x H): 155 x 235 mm

