

Electronic Trading and Blockchain Yesterday, Today and Tomorrow

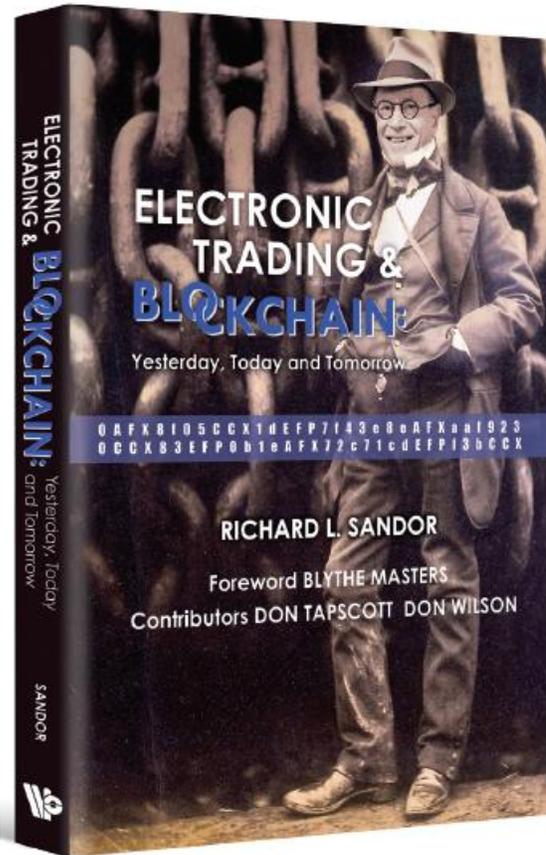
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by **Richard Sandor**

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“Electronic Trading and the Blockchain – Yesterday, Today and Tomorrow” – Richard Sandor’s new book coming out second quarter 2018. Richard Sandor discusses his experience leading the first project to design and establish an electronic trading platform and for-profit Exchange when he taught at Berkeley in the late 1960s. He writes the story of that project, and its eventual use in the disputes over electronic trading technology when exchanges were going public. Electronic trading took over thirty years from its inception to full commercialization, but it dramatically changed the landscape for exchanges and financial markets in general. Dr. Sandor asks what does the future hold for these markets as the blockchain technology starts to become mainstream. If the inception of the blockchain began in 2008, will it become fully commercialized in the same 20-30 years that it took for electronic trading to become ubiquitous? Or will it become widely commercial much sooner? What impact will it have on the financial sector and new financial products?



* cover designed by Ellen Sandor & Diana Torres, (art)ⁿ Lab

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The co-authors, directly or indirectly, address these same questions. The foreword is by Blythe Masters, CEO of Digital Assets and one of the leading figures in the blockchain finance space. Other contributors include Don Wilson, one of the leading market-makers in the world, on the transition from open outcry to electronic trading and the impact of the blockchain on trading and settlement. Don Tapscott, a New York Times bestselling author, writes on how the blockchain will impact areas such as environmental markets. This is a book for anyone interested on how the blockchain will impact banking, finance, and trading in the years to come.

Readership: Finance students, researchers, and readers interested in learning about the early years of electronic trading in the US.

Contents

- **Foreword** by Blythe Masters, CEO, Digital Asset
- **Introduction** (Richard L. Sandor)
- **Project CCARP: Interim Report Preliminary Design for an Electronic Market for the Pacific Commodities Exchange (including original preface/summary and highlights)** (Richard L. Sandor)
- **Market Structure Evolution — Perspectives of a Market Practitioner** (Donald R. Wilson, Jr. founder and CEO, DRW)
- **Blockchain Reckoning — Lowering Barriers to a Just and Sustainable Future** (Don Tapscott, CEO of The Tapscott Group)

"Doc" Sandor is a true thought leader and innovator of the financial markets revolution. From his unique perch, he links the history of financial innovation to the development of the Blockchain.

His own insights are further enhanced through powerful contributions from Blythe Masters, Don Tapscott and Don Wilson. If you want to understand Blockchain, read this book."

-- William J. Brodsky, Chairman, Cedar Street Asset Management. Former Chairman & CEO, CBOE Holdings, Former Chairman World Federation of Exchange, Former President & CEO, Chicago Mercantile Exchange.

"Richard Sandor's first-hand experience with electronic trading and the applications of blockchain technology to finance and the environment discussed by his excellent team of contributors should be of great interest to inventors and students in China. Dr. Sandor's belief in the power of markets and the ability of humans to invent is truly inspiring."

-- Ruoying Chen, Associate Professor and Assistant Dean, Peking University Law School, China

"Richard Sandor is one of the leading visionaries of the trading industry. Many of his earliest insights helped transform the derivatives business and establish the norms of today. His new book showcases the technology revolution that has taken us from pit trading to new financial technologies like blockchain. Written from his compelling, eye-witness perspective, Richard vividly captures the innovative spirit that continues to propel this dynamic industry forward."

- Terrence A. Duffy, Chairman and CEO, CME Group

"This book by Richard Sandor and some collaborators provides a fascinating and revealing account of the evolution of how financial markets truly operate and valuable conjectures for what is to come in the future. Reading it opens the door to the perspectives of some who have witnessed up front some of the changes, and it provides valuable food for thought about intelligent ways to engage in financial market oversight in a changing environment."

- Lars Peter Hansen, David Rockefeller Distinguished Service Professor, The University of Chicago, Departments of Economics, Statistics and the Booth School of Business & 2013 recipient of the Nobel Memorial Prize in Economics.

"This book needed to be written. And for my money, it needed to be written by Richard Sandor. When he first mentioned he was writing it, I could only think, "Of course." Then I greedily wanted to get my hands on a draft. Now I will use it to teach my blockchain lectures in my class on Currency Markets."

-- Richard Lyons, Dean and Professor, Haas School of Business, UC Berkeley

"Economists standardly assume the existence of financial markets. But this assumption misses the deeper and more difficult questions of when, why, and how markets exist, as well as how they can be made more efficient. This magnificent collection of essays by the very leaders who developed new financial markets tackles these vital questions. By looking both to the past (such as the first all-electronic exchange) and to the future (such as blockchain), the essays reveal how human creativity, relationships, and sheer hard work bring financial markets into existence. These are important, edifying, and inspiring lessons. No reader of this book will ever again be content to assume the existence of financial markets."

- Thomas J. Miles, Dean and Clifton R. Musser Professor of Law and Economics at the University of Chicago Law School

"Richard Sandor continues to be a leading innovator in the financial services industry. With his exceptional intellect, entrepreneurial spirit and ability to collaborate with others, Richard addresses real world challenges through the power of technology and markets. Richard has a track record of turning new ideas into reality."

- Michael O'Grady, CEO, Northern Trust Corporation

"From financial futures to blockchain, Richard Sandor is first in innovation, first in explanation, and first in the hearts and minds of finance professionals everywhere. His latest book on blockchain is one small step for Richard but one giant leap for financial literacy."

- Timothy J. O'Neill, Partner, Goldman Sachs & Co.

"When one thinks how best to describe Richard Sandor – words like visionary, innovator, entrepreneur, and commercial all come to mind. From his early financial derivatives days that precede our relationship to his climate interests when we collaborated together, to water, to bank loans and beyond – Richard has the rare skill of seeing a market need, innovating a solution and more importantly, knowing how to commercialize the idea. If Richard has a new idea – it is always worth hearing him out as no doubt he will be onto to something. Perhaps I should add incredibly successful to his descriptors and uniquely Richard's way – always persistent yet pleasant, always upbeat and inspiring, always authentic and always a good friend who welcomes you with a smile."

-- Richie Prager, Senior Managing Director, BlackRock

"When I joined the derivatives world in the late 80s I was told that Richard Sandor is the father of financial futures. This fascinating book with excellent contributions by some of the finest minds in our industry is making a very compelling case that he is also the father of electronic trading."

-- Andreas Preuss, Deputy CEO Deutsche Boerse AG, former CEO Eurex

"Richard Sandor has revolutionized the way we think about financial markets in this nation. In addition to being an intellectual visionary he has actually taken his ideas and changed the way we do business. This book provides us with important perspectives that will help shape the future."

-- Michael H. Schill, President and Professor of Law University of Oregon

"I had the privilege of working for the 'Doc' in my early career more than 35 years ago. I was a rather junior employee and he was already a legend. It was truly an inspiration working under him and certainly transformed my vision, boundaries and career. He had not only the skill of communication and compassion but also ideas, innovation, originality, charisma and energy. I learned more in those years than in the previous 20. He is indeed a modern day Isambard Kingdom Brunel. He has within this book assembled a fantastic roster of experts to guide us through the implications of blockchain for modern finance and the environment."

-- Michael Spencer, CEO, NEX plc

“Dr. Sandor has been at the forefront developing widely-accepted risk management solutions. As a young academic in the 1960’s, he was already ahead of the curve on the digitization of markets with early-generation computers. Known throughout the world for pioneering many of the most relied upon instruments and techniques for transforming price risk, he has earned global recognition and is celebrated as the “father of financial futures.” Most recently, he has successfully demonstrated how a well-designed market can solve for shortages of food and water, as well as encourage investment in clean air. And he’s not resting, as he continues to pioneer new market solutions with blockchain technologies. Any time Dr. Sandor shares his perspectives on a topic, the industry takes notice.”

- Jeffrey C. Sprecher, Chairman & CEO – Intercontinental Exchange | ICE Chairman - New York Stock Exchange

“Dr. Richard Sandor has produced a remarkable and unique book. A careful reading enlightens us as to the problems that needed to be overcome in the early days of electronic trading, to the modern days of electronic market design incorporating the Blockchain. It is essential reading for anyone who aspires to write a Cryptocurrency white paper or develop new electronic trading system.”

-- Murray Stahl, Chairman of Horizon Kinetics LLC

“Richard Sandor has made a living of creating markets, technologies and exchanges. He experienced the adrenalin and the challenges that come from building new financial products to solve real-world problems. I personally saw what Dr. Sandor did to develop environmental financial products which changed the way the world thinks about the value of carbon and other emissions. This book tells the story of connections between the current blockchain revolution and those prior trading and technology innovations. I recommend this book to anyone who wants to both go back in time to the exciting and challenging early days of financial innovation as well as learn how blockchain is changing trading now and in the future.”

-- Brian X. Tierney, executive vice president and chief financial officer, American Electric Power

“Richard Sandor has been a leading financial innovator, beginning with his role in the nascent development of electronic trading in the 1960’s and throughout subsequent decades as a pioneer of new markets, technologies and exchanges. He is uniquely qualified to write this highly recommended book, which provides both a fascinating and relevant look back at the evolution of financial innovation, as well as an expert’s view on how blockchain technology will impact finance, trading and exchanges going forward.”

- Edward T. Tilly, Chairman and CEO, Cboe Global Markets

“At last! A definitive book which examines both the serious mechanics of Blockchain - with its power to revolutionise how the world’s money will be transacted - and explains the peripheral mania of crypto currencies. The author is an experienced and distinguished economist who is also the master of successful and innovative markets. No better guide.”

-- Sir Brian Williamson, CBE, past Chairman of the London International Financial Futures and Options Exchange (LIFFE)

“A modestly self-described student of markets, Richard Sandor has never been one for a heavy history lesson, but he deftly weaves a compelling narrative through the past to take us well into the financial future, with an elegant self-deprecation for his sheer genius of thought, analysis, insight and vision. His insights alongside his elegant portfolio of persuasive thinkers is a treasure to behold. This one man blockchain of financial insight has assembled a cornucopia of ideas from among the best minds in this new technology.”

- Patrick L. Young, author "Capital Market Revolution!"

About the Author: Richard L Sandor (Ph.D., Dr. sc. h. c.)



Richard L Sandor (Ph.D., Dr. sc. h. c.) is Chairman and CEO of the American Financial Exchange (AFX), an electronic exchange for direct interbank/financial institution lending and borrowing. He is also the CEO of Environmental Financial Products, which specializes in inventing, designing and developing new financial markets. Dr. Sandor is currently the Aaron Director Lecturer in Law and Economics at the University of Chicago Law School and an Honorary Professor at the University of Hong Kong. He was honored by the City of Chicago for his universal recognition as the “father of financial futures”. In 2002 he was named by TIME Magazine a “Hero of the Planet”; and in 2007 as one of the magazine’s “Heroes of the Environment” for his work as the “Father of Carbon Trading.” In October 2013, Dr. Sandor was awarded the title of *Chevalier dans l’ordre de la Légion*

d’Honneur (Knight in the French National Order of the Legion of Honor), for his accomplishments in the field of environmental finance and carbon trading. He holds an honorary degree of Doctor of Science, *honoris causa*, from the Swiss Federal Institute of Technology (ETH). He served on the board of directors of leading commodities and futures exchanges such as the Chicago Mercantile Exchange, Intercontinental Exchange, Chicago Board of Trade, London International Financial Futures and Options Exchange (LIFFE) and Tianjin Climate Exchange (TCX); and of several philanthropic and not-for-profit organizations such as the School of the Art Institute of Chicago. Dr. Sandor is the author of “Good Derivatives: A Story of Financial and Environmental Innovation”; the lead author of “Environmental Markets: A New Asset Class”, published by the CFA Institute Research Foundation; “Sustainable Investing and Environmental Markets: Opportunities in a New Asset Class” and “How I Saw It: Analysis and Commentary on Environmental Finance (1999–2005)” published by World Scientific. His books have been translated in Chinese by People’s Oriental Press. His latest book, “Electronic Trading and Blockchain: Yesterday, Today and Tomorrow”, is forthcoming by World Scientific in the spring of 2018.

Book is available for pre-order on World Scientific’s website (will ship week of 4/23)

<https://www.worldscientific.com/worldscibooks/10.1142/10812>

Book is available for pre-order on Amazon (will ship at the end of May)

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