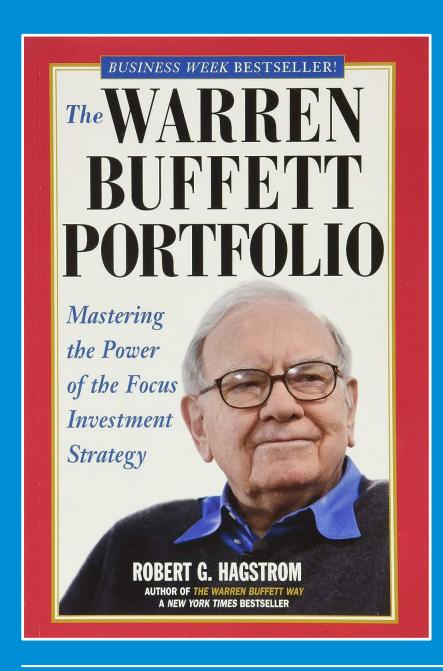
Investing: The Last Liberal Art

Robert G. Hagstrom, CFA

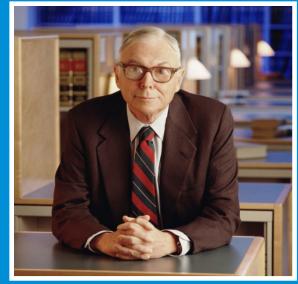
Wisdom of Charlie Munger Tribute

University of Nebraska Omaha
College of Business
Mammel Hall
May 2, 2024



- Focus Investing
- Super-Investors of Buffettville
- Kelly Optimization Model
- Market as a Complex Adaptive
 System Santa Fe Institute
- Psychology of Human Misjudgment
- Worldly Wisdom Building a latticework of mental models

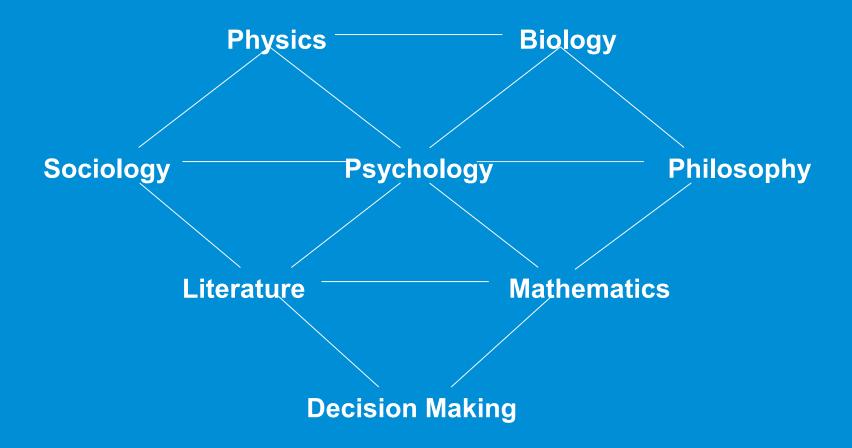
"If you want to be a good thinker, you must develop a mind that can jump jurisdictional boundaries."



— Charlie Munger

Source: Corbis Images

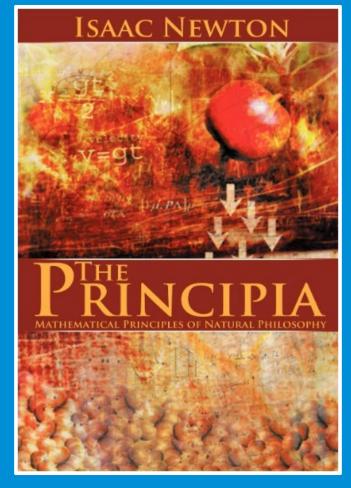
The Liberal Arts of Investing



Isaac Newton



Source: Corbis Images



Profound impact on the Scientific Revolution of the 17th and 18th century. The main idea and insights from Newton's *The Principia* was to provide a mathematical framework for understanding the *physical* world based on the laws of motion and gravitation.

Newton's Third Law of Motion

"For every action there is an equal and opposite reaction."

Economics: Supply & Demand

Markets: Reversion to the Mean

"Many shall be restored that now are fallen, and many shall fall that are in honour"

Security Analysis

Benjamin Graham and David Dodd

Reversion to the mean is a powerful force in markets, but it is not immutable. "Polling does not replace thinking."

Warren Buffett

"The real trouble with this world of ours is not that it is an unreasonable world, or even that it is a reasonable one. The commonest kind of trouble is that it is nearly reasonable, but not quite."

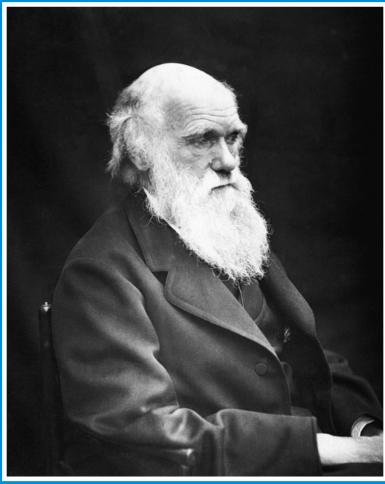
"Life is not an illogicality; yet it is a trap for logicians. It looks just a little more mathematical and regular than it is; its exactitude is obvious, but its inexactitude is hidden; its wildness lies in wait."

— G. K. Chesterton

"The Mecca of the economist lies in economic biology rather than in economic dynamics. But biological conceptions are more complex than those of mechanics; [we] must therefore give a relatively large place to mechanical analogies."

> — Alfred Marshall, Principles of Economics, Eighth Edition (1920, p.xii)

Charles Darwin



Source: Corbis Images

"No man ever steps in the same river twice, for it's not the same river and he is not the same man."

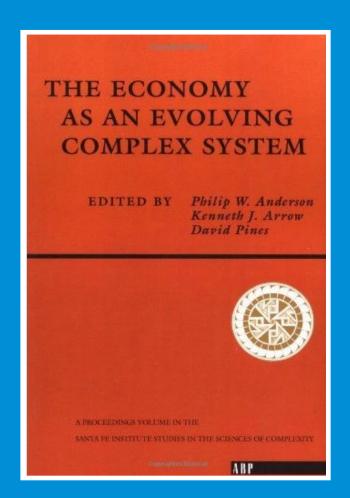
— Heraclitus (544 B.C.)

From Physics-Based Economics to Biology-Based Economics

Classical Economics

Keynes/
Minsky

Economy as an Evolving Complex System



BIOLOGY: The Origin of a New Species

- Markets are inherently complex more akin to biology than physics
- Non-Equilibrium System
 - Small Effects Large Consequences
 - Large Effects Small Consequences
- Negative Feedback Loops versus Positive Feedbacks
- The System Learns and Adapts
- No Stable Mean

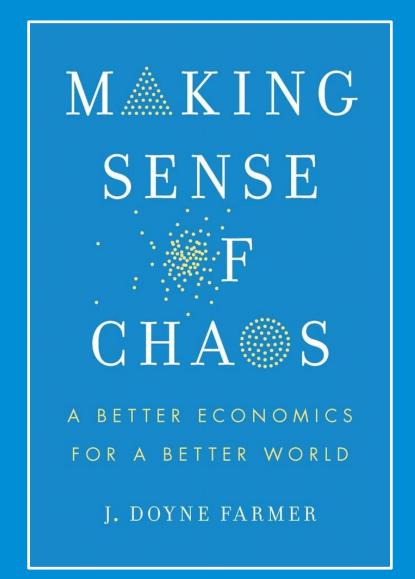
Economics, Cognition, and Society

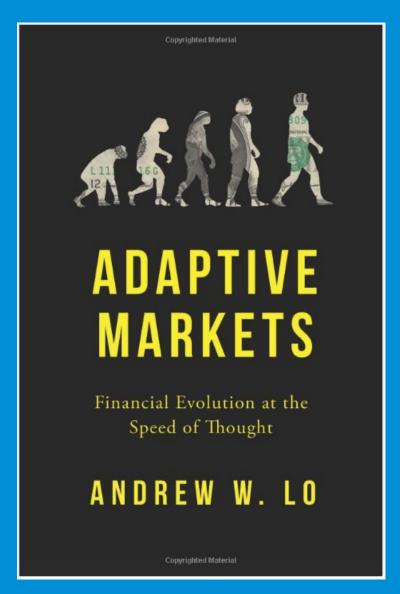
INCREASING
RETURNS AND
PATH DEPENDENCE
IN THE ECONOMY

W. BRIAN ARTHUR

Foreword by Kenneth J. Arrow

MICHIGAN_





Philosophy

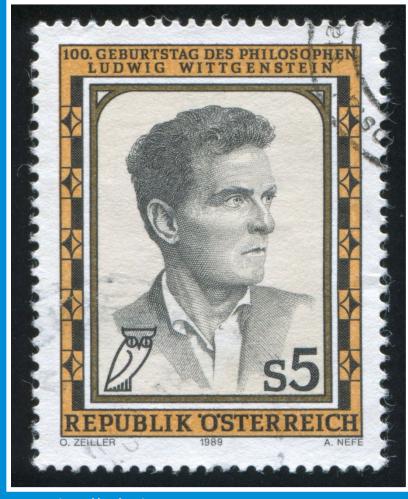
Ontological – unexplainable; beyond our mental capabilities

Epistemological – limited by our ability to understand

"disorder is nothing more than order misunderstood."

— Alexander Pope (1688 – 1744)

Ludwig Wittgenstein



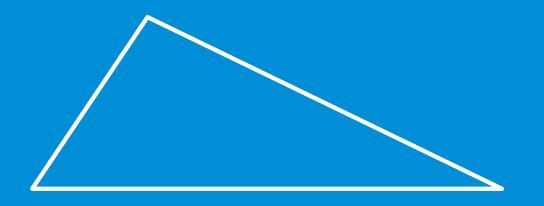
"All problems in philosophy arise from linguistic misunderstanding."

Source: http://us.fotolia.com

Language – Descriptions – Explanations

"For a large class of cases – though not for all – in which we employ the word 'meaning' it can be defined thus: the meaning of a word is its use in the language."

Ludwig Wittgenstein,
 Philosophical Investigations (1953)



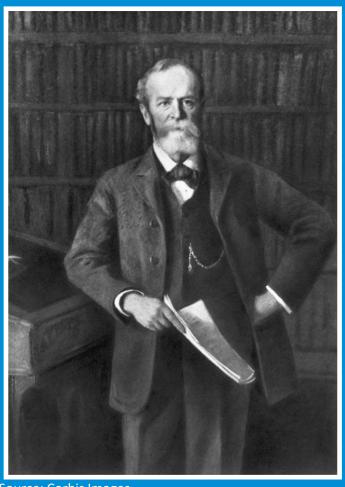
"Take as an example the aspects of a triangle. This triangle can be seen as a triangular hole, as a solid, as a geometrical drawing; as standing on it's base, as hanging from its apex, as a mountain, as a wedge, as an arrow or a pointer, as an overturned object which is meant to stand on the shorter side of the right angle, as a half parallelogram, and as various other things."

— Ludwig Wittgenstein, Philosophical Investigations (1953)

"Failure to explain is caused by failure to describe."

— Benoit Mandlebrot

William James



Source: Corbis Images

"To perceive the world differently, we must be willing to change our belief system, let the past slip away, expand our sense of now, and dissolve the fear in our minds."

New facts burst old rules; then newly divined conceptions bind old and new together into a reconciling law."

-The Will to Believe (1896)

Father of the American Philosophy - Pragmatism

"beliefs are man-made...they are conceptual language we use to write down our observations of nature...ideas become true just in so far as they help us get into satisfactory relation with other parts of our experience...A belief is true and has cash value if it helps us get from one place to another."

Truth becomes a verb, not a noun.

— William James (1842 – 1910)

"...so we can say that pragmatism is a process that allows people to navigate an uncertain world without becoming stranded on the desert island of absolutes."

— Robert Hagstrom, Investing: The Last Liberal Art (2000)

The Evolution of Value Investing

Pragmatism at Work

Benjamin Graham

- Net-Net Current Assets
- Book Value
- Low GAAP Accounting Factors

Warren Buffett

• Owner-Earnings/John Burr Williams, *The Theory of Investment Value (1938)*

Alfred Rappaport

Creating Shareholder Value (1986)

Bill Miller

Network Effects, Lock-in, Path Dependence,
 Increasing Returns Economics – Santa Fe Institute

Mathematics Beware of Nonstationary

"For past averages to be meaningful, the data being averaged must be drawn from the same population. If this is not the case – if the data comes from populations that are different – the data are said to be nonstationary. When data are nonstationary, projecting past averages typically produces nonsensical results."

— Bradford Cornell, The Equity Risk Premium (1999)

This is NOT your Father's Stock Market

S&P 500 Index Sector Weightings (1975)		
	Weighting	
Sector		
Industrials	15.4%	
Materials	15.2%	
Utilities	13.8%	
Financials	13.0%	
Consumer Discretionary	12.6%	
Consumer Staples	10.8%	
Energy	10.0%	
Health Care	4.4%	
Information Technology	3.0%	
Telecommunication Svcs.	1.8%	
Total	100.0%	

S&P 500 Index Sector Weightings (2024)		
Sector	Weighting	
Information Technology	26.1%	
Health Care	14.5%	
Financials	12.9%	
Consumer Discretionary	9.9%	
Industrials	8.6%	
Communication Services	8.2%	
Consumer Staples	7.4%	
Energy	4.5%	
Utilities	2.9%	
Materials	2.6%	
Real Estate	2.5%	
Total	100.0%	

Mathematics Beware of the Averages

Most people look on averages as basic reality, giving little thought to the possible variances.

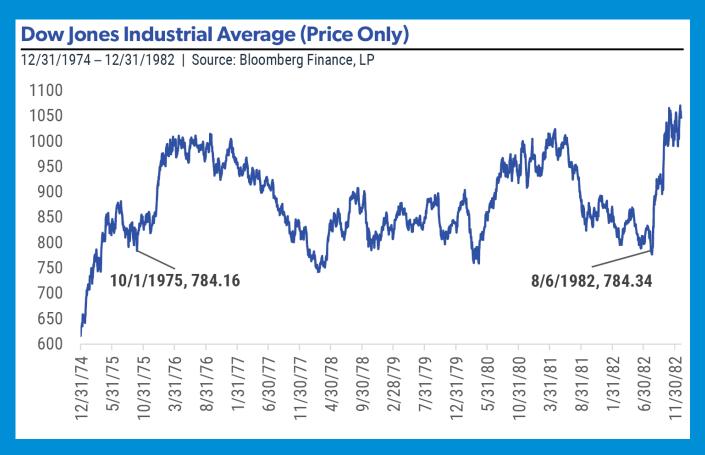
"The old Platonic strategy of abstracting a full house as a single figure [average]...and then tracing the pathway of this single figure through time, usually leads to error and confusion"

—Stephen Jay Gould

Full House: The Spread of Excellence from Plato to Darwin (1996)

The most important lesson investors can learn from Gould's experience is to appreciate the differences between the trend of a system and the trends in the system.

Who's Afraid of A Sideways Market

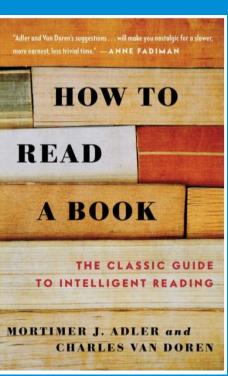


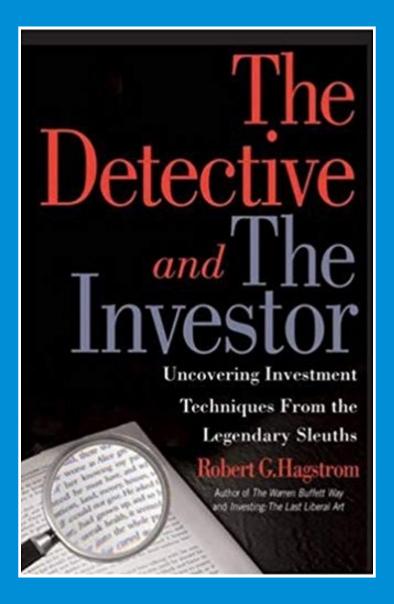
Number of S&P 500 Companies Doubling or More Over Four Five-Year Rolling Periods (1975)

Sector	# of Companies Doubling or More	# of Companies Outperforming
	-	
Energy	135	67.8%
Industrials	131	42.7%
Information Technology	26	42.6%
Financials	109	42.1%
Consumer Discretionary	93	36.8%
Health Care	30	34.5%
Materials	94	31.0%
Telecommunication Services	11	30.6%
Utilities	79	28.4%
Consumer Staples	51	23.5%
Total	759	38.0% (Avg.)

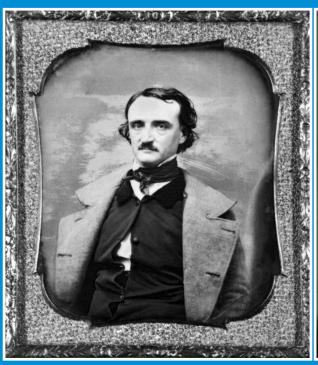
Literature

- How to Read a Book: A Classic Guide to Intelligent Reading (1940) Mortimer Adler
 - Inspectional Reading
 - Systematic Skimming
 - Analytical Reading
 - Syntopical Reading
- Cast the "net" far and wide
- Non-fiction and fictional readings

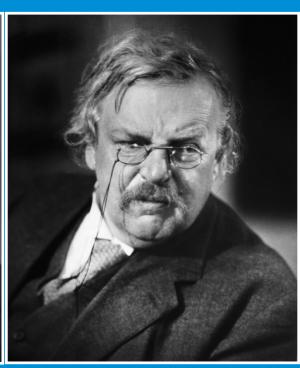




Edgar Allen Poe, Sir Arthur Conan Doyle, and G. K. Chesterton







Source: Corbis Images

The Habits of Mind of the Great Detectives

"Bad" - Incomplete Information

- Auguste Dupin
 - Develop a skeptic's mindset; don't automatically accept conventional wisdom
 - Conduct a thorough investigation

"Bad" - Analytics

- > Sherlock Holmes
 - Begin an investigation with an objective and unemotional viewpoint
 - Pay attention to the tiniest details
 - Remain open minded to new, even contrary, information
 - Apply a process of logical reasoning to all you learn

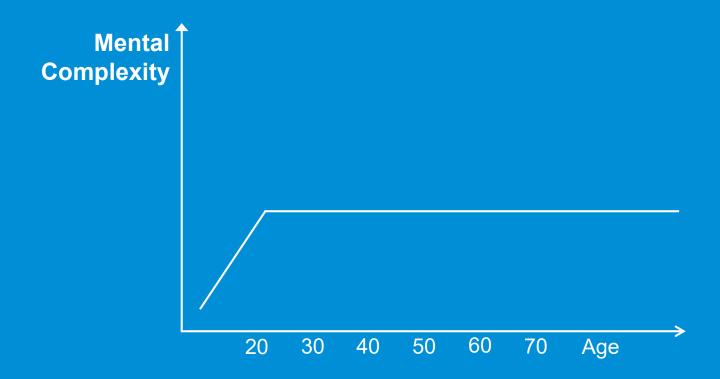
"Bad" - Psychology

- > Father Brown
 - Become a student of psychology
 - Seek alternative explanations and re-descriptions

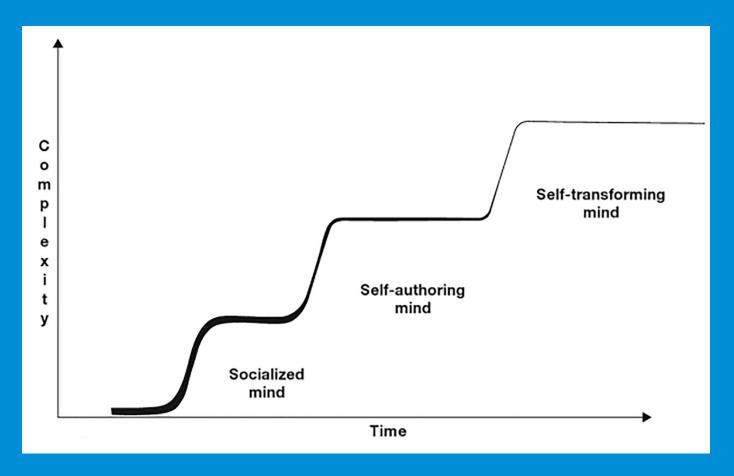
Decision Making

- We often experience a mismatch between the world's complexity and our own ability to navigate the world.
- This mismatch creates a "complexity gap" that lags our own mental abilities in contrast to the very nature of the world's demands.
- Two logical ways to solve the mismatch
 - 1) Reduce the world's complexity
 - Improve our own ability to manage the increasing complexity of the world

Age and Mental Complexity: The View 30 Years Ago



Mental Complexity Levels



Source: Robert Keegan & Lisa Laskow, *Immunity to Change*, Harvard Business Press, 2009

The Socialized Mind

- Largely influenced by what is believed others want to hear
- Strong desire to maintain alignment with important others
- Wants to preserve the status quo
- Actions are dictated by "group think"...what Buffett calls the "institutional imperative," the lemming-like behavior of institutions to mindlessly imitate one another

The Self-Authoring Mind

- You step back away from "group think"
- You are able to evaluate and make choices about external expectations apart from the group
- You begin to develop your own belief system, personal code, ideology; albeit within the same boundaries learned as a "socialized mind"

The Self-Transforming Mind

- Able to reflect on the limits of ideology
- Begin to see the system as incomplete
- Is mindful that no matter how powerful a given design might be, there is a nagging question the design is leaving something out
- Questions are no longer about the framework of the design but the design itself

"Three Minds" Riding in a Car

1) Socialized Mind

They are just happy to be in the car pool. All they want is just to be included. It doesn't much matter to them who is the driver.

2) Self-Authorizing Mind

They are also happy to be in the car but they want to drive. But instead of staying on the heavily traveled highways, they seek alternative new routes within the existing map.

3) Self-Transforming Mind

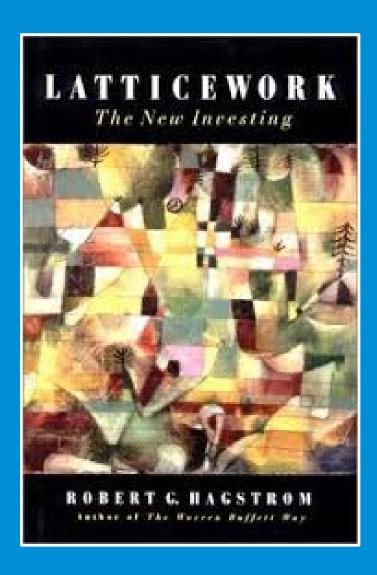
They still want to drive and can stay focused driving so long as they believe they have a good map. But if they come to realize the existing map outlines a topography that limits where they want to go, the self-transforming mind seeks to remake the map.

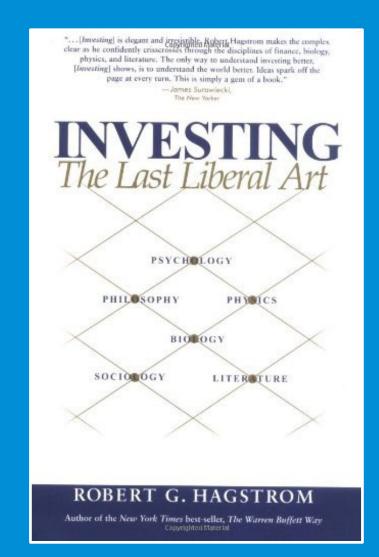
Decision Making Is *NOT* an I.Q. Problem

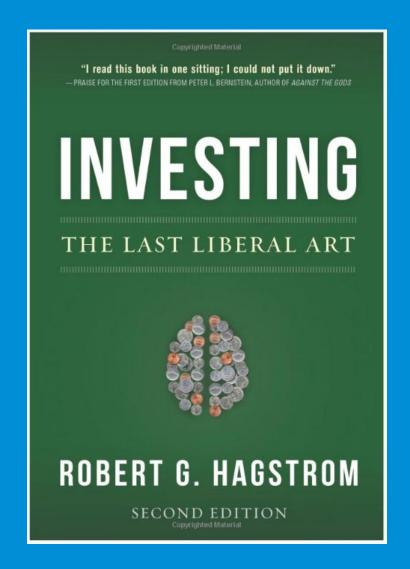
Today, most of the challenges investors confront require more than polishing technical skills within the existing topography.

The challenges we face, called complexity gaps, can only be met by transforming our mindset by advancing to a more sophisticated stage of mental development.

- You must find adaptive (nontechnical) means to meet adaptive challenges.
- Avoid "the fatal unconnectedness of academic disciplines" –
 Alfred North Whitehead
- Specialization causes a lot of bad things. It's a pernicious evil.
 Fatal." Charlie Munger







"The faculty for perceiving analogies is the best indication of genius...

People who can analogize are the wits, the poets, the inventors, the scientific men, the practical geniuses."

— William James, The Principles of Psychology (1890)



Robert G. Hagstrom, CFA

Robert is Chief Investment Officer of EquityCompass Investment Management, LLC and Senior Portfolio Manager of the Global Leaders Portfolio. He joined EquityCompass in April 2014 and launched the Global Leaders Portfolio in July 2014. Robert was appointed Chief Investment Officer in March 2019.

Robert has more than 30 years of investment experience. Prior to joining EquityCompass, he was Chief Investment Strategist at Legg Mason Investment Counsel, and before that, the Portfolio Manager of the Growth Equity Strategy at Legg Mason Capital Management for 14 years where he managed \$7 billion in assets. Robert received "Honorable Mention" recognition in Morningstar's Domestic-Stock Fund Manager of the Year in 2007 while with Legg Mason.*

Robert is the author of seven investment books including The New York Times Best Seller, *The Warren Buffett Way*, widely considered to be the definitive book on the investment approach and strategies of Warren Buffett. The book has sold over one million copies worldwide and is translated into 17 foreign languages. In addition, Robert wrote, *Investing: The Last Liberal Art*, a multidiscipline examination of investing and decision making. His latest book, published in 2021, is *Warren Buffett: Inside the Ultimate Money Mind*.

Robert earned his Bachelor's and Master's of Arts degrees from Villanova University. He is a Chartered Financial Analyst, a member of the CFA Institute, and the CFA Society of Philadelphia.