

NEW
PRINCIPLES
OF
EQUITY INVESTMENT



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NEW PRINCIPLES OF EQUITY INVESTMENT

LES COLEMAN

The University of Melbourne, Australia



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An abundance of widely accepted folklore is used in the investments industry.

Francis and Kim (2013) *Modern Portfolio Theory*

Most claimed research findings in financial economics are likely false.

Harvey, Liu, and Zhu (2015)

The market is not well anchored by fundamentals. People do not even know to any degree of accuracy what the 'right' level of the market is.

Robert J. Shiller (2000, p. 147) *Irrational Exuberance*

We need empirically valid theories of how business organizations operate, of how investment decisions are actually made.

Herb Simon (1986, p. xv) *Handbook of Behavioral Economics*

The transition from a paradigm in crisis to a new one ... is a reconstruction of the field from new fundamentals, a reconstruction that changes some of the field's most elementary theoretical generalizations as well as many of its methods and applications.

Thomas S. Kuhn (1962, pp. 84–85) *The Structure of Scientific Revolutions*

How can the validity of axioms and their implications be tested without referring to observed facts?

Maurice Allais (1988, p. 274)

The difficulty lies not so much in developing new ideas as in escaping from old ones.

John Maynard Keynes (1936, p. vii) *The General Theory of Employment, Interest and Money*

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About the Author

Les Coleman is a finance academic at the University of Melbourne. There he completed a bachelor's degree in Mining Engineering (1974), and a PhD by thesis which was published as *Why Managers and Companies Take Risks* (Springer, 2006). Les also holds a Master of Economics from Sydney University and a BSc (Economics) from London University.

Prior to returning to study in 2002 and then moving into academia, Les worked for almost 30 years in senior management positions with resources, manufacturing and finance companies in Australia and overseas. He started as a mining engineer with Anglo American Corporation in Zambia, and then joined Mobil Oil in Melbourne, where highlights of his career include four years in Mobil Corporation's international planning group at its global headquarters near Washington, DC, and six years as regional treasurer for ExxonMobil Australia. In the last 25 years, he has filled senior investment roles as a trustee of two employee superannuation funds and that of a public offer superannuation fund, a member of the Investment Management Committee of IOOF Holdings Limited and a director of 10 companies involved in finance, retail and distribution, including Australian Ethical Investment Limited and Strasburger Enterprises Pty Ltd. Les has written and spoken widely on finance and investment strategies, and for four years was a weekly columnist with *The Australian* newspaper.

Les has published six books, four book chapters and close to 30 journal articles. His main research interest is applied finance, especially financial decision making by investment funds and firms. This was informed by his diverse industry experience and involved extensive field research, including interviews with almost 60 finance executives in Istanbul, London, Melbourne and New York. These insights enabled him to apply the scientific method to investment: *The Lunacy of Modern Finance Theory & Regulation* (Routledge, 2014) analysed shortcomings in the finance discipline, and was followed by *Applied Investment Theory* (Palgrave Macmillan, 2016) which set out a descriptive model of the practices of professional

investors. He also has an interest in sustainability and risk as decision stimuli, and his book entitled *Risk Strategies: Dialling up Optimum Firm Risk* (Gower, 2009) foreshadowed a body of theory to manage risk strategically (in much the same way as human physiology and physical sciences support modern medical and engineering techniques respectively). He delivers executive education programmes in Australia and overseas, and has received research and teaching awards. Les is a member of the editorial board of three academic journals, and is a joint recipient of an Australian Research Council linkage grant.

Les has three adult children and lives in the coastal hinterland near Melbourne.

New Principles of Equity Investment

1. *Large investors run segregated equity portfolios*, and other investors only infrequently allocate assets. So we can simplify an overly complex task by separating investment from asset allocation, and treat equity investment as ranking candidate stocks.
 - Benchmark, or opportunity cost, becomes equity market return.
 - No relevance for risk-free rate, equity risk premium, systematic risk.
2. *Savers have long investment horizons, but investors lack foresight*: managers and analysts cannot forecast beyond about a year; annual turnover of equities exceeds 100 percent.
 - Limit valuation to a one-year holding period.
 - Discount rate becomes irrelevant.
3. *Equity prices have unique structure*. They are extensive variables comprising multiple complex sub-systems; and information-based claims on future payoffs or intangible contracts.
 - Equities have more in common with currencies than with standard goods
 - Equities' differences from goods in neoclassical economics call for a new price model.
4. *Extensive variables are modelled in other disciplines with time-varying components*. Follows Miller and Modigliani (1961) and others' belief that equity value is influenced via different channels.
 - Four components are proposed for equity prices:
 - *Intrinsic*: Objective, fundamental value of assets in place (on-going firm value).
 - *Transactional*: Specifics of transaction or setting (size, location, agents).
 - *Optional*: Contingent strategic opportunities (similar to real growth options in asset pricing models) and hazard liabilities.
 - *Extrinsic*: Crowd sourced through socialisation of equity markets. Incorporates behavioural biases whose persistence indicates that they meet some economic need.
 - Puzzles of investor reliance on non-fundamental aspects of price are explained away.

(Continued)

5. *To predict future equity price*

- It is not practical to codify qualitative analysis, and fundamental influences vary over time.
- Capture time-varying non-linear relationships with dynamically conditional error correction model and three-pass regression filter.
- Rely on lagged firm-specific variables proxying for components above
 - Accounting data measures intrinsic value and exercise of real options.
 - Market data quantifies extrinsic value (especially price).
 - Convex transformations of data (square, semi deviation, standard deviation) value real options.

6. Use risk with dictionary meaning as possibility of value loss:

- Manage short-term firm-specific risk through Bayes rule, and ESG and SRI filters.
- Manage longer-term equity risk at portfolio level.

7. Form portfolios that optimise risk-adjusted return from active investment over long-term investor horizon:

- Diversify across time and sector, and control with downside beta.
- Apply style tilts, leverage, and staking strategies; incorporate derivatives.

8. Time transactions using theory-supported technical analysis based on price patterns in seasonality and liquidity and logical decision cues.

Fig. 1.1: Summary of *New Principles of Equity Investment*.