

THE LONG GOOD BUY



Analysing Cycles in Markets

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PETER C. OPPENHEIMER

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—Lord Brian Griffiths, Chairman - Centre for Enterprise,
Markets and Ethics, Oxford

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This edition first published 2020
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John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, United Kingdom

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Library of Congress Cataloging-in-Publication Data

Names: Oppenheimer, Peter C., author.

Title: The long good buy : analysing cycles in markets / Peter Oppenheimer.

Description: Chichester, West Sussex, United Kingdom : John Wiley & Sons, 2020. | Includes bibliographical references and index.

Identifiers: LCCN 2020001577 (print) | LCCN 2020001578 (ebook) | ISBN 9781119688976 (cloth) | ISBN 9781119688983 (adobe pdf) | ISBN 9781119689003 (epub)

Subjects: LCSH: Business cycles. | Investments. | Finance.

Classification: LCC HB3720 .O67 2020 (print) | LCC HB3720 (ebook) | DDC 338.5/42—dc23

LC record available at <https://lcn.loc.gov/2020001577>

LC ebook record available at <https://lcn.loc.gov/2020001578>

Cover Design: Wiley

Cover Image: JDawnInk/DigitalVision Vectors/Getty Images

Set in 11.5/14 STIX Two Text by SPi Global, Chennai

Printed in Great Britain by CPI Antony Rowe, UK

10 9 8 7 6 5 4 3 2 1

To Joanna, Jake and Mia

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Acknowledgements

This book is about economic and financial market cycles and the factors that affect them.

It refers to, and reflects, much of the work that I have developed, together with my team, since the mid-1980s. I have been lucky enough to have worked with many incredible colleagues since then, and I have benefited from countless conversations with clients, all of which has helped develop my understanding of economies and markets and the factors that shape and drive them. Their influence has very much shaped the ideas and thoughts in this book.

I owe a huge debt of gratitude to all the people at Goldman Sachs who have worked closely with me in the Macro Research group. I would particularly like to thank Sharon Bell, my close colleague for 25 years; she has been instrumental to much of the work reflected in this book and it could not have been written without her. Christian Mueller-Glissmann also made a major contribution

to many of the ideas and frameworks reflected in the book and in the analysis of Goldman Sachs Strategy Research over the past decade. Both have been a constant source of innovative ideas and personal support.

A number of other colleagues in my team at Goldman Sachs have worked on, and helped to develop, many of the ideas in the book. Anders Nielsen and Jessica Binder Graham coauthored our framework on Equity Risk Premia and the DDM model mentioned in the book and discussed in an article in the *Journal of Portfolio Management*.¹ I would also like to thank current members of my team – Lilia Peytavin, Guillaume Jaisson and Alessio Rizzi – for their contributions to the book and for their ideas, constant dedication and hard work; I am also very grateful to Guillaume Jaisson for preparing and developing exhibits in the book.

Thanks also go to colleagues who have read and commented on drafts of the book: Jessica Binder Graham, Paul Smith and Brian Rooney. My other long-standing colleagues in the strategy team at Goldman Sachs – David Kostin in New York, Tim Moe in Hong Kong and Kathy Matsui in Tokyo – have been a constant source of ideas and enthusiasm, as has Steve Strongin, the global head of research at Goldman Sachs, who kindly supported and encouraged me in writing this book and has been a major influence on my thinking.

I am very grateful to Loretta Sunnucks at Goldman Sachs for editing the manuscript and for her tireless patience and invaluable suggestions and input throughout the process. I would like to thank former colleagues who have read and commented on the drafts. My previous heads of research – Lord Jim O’Neil, former chief economist at Goldman Sachs and chairman of Goldman Sachs Investment Management, and Keith Skeoch, CEO at Standard Life – have both been major influences and a source of ideas. I would also like to thank Huw Pill, senior lecturer at the Harvard Business School, Elias Papaioannou, professor of economics at the London Business School, and Lord Brian Griffiths, Chairman of the Centre for

¹ Binder, J., Nielsen, A.E.B., and Oppenheimer, P. (2010). Finding fair value in global equities: Part I. *Journal of Portfolio Management*, 36(2), 80–93.

Enterprise, Markets and Ethics, for their insights. In particular, my thanks go to Stephen King, senior advisor to HSBC, for providing invaluable suggestions and for his detailed guidance and support.

Finally, I would like to thank my wonderful wife, Joanna, and my children, Jake and Mia, who are a constant source of inspiration and joy for me.

About the Author

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Preface

This book is about economic and financial market cycles and the factors that affect them. The motivation for writing it has been my long-standing fascination with how repeated patterns of behaviour and market cycles seem to exist despite the enormous changes that have occurred in economies, society and technology over time.

Over the past 35 years of my career, inflation expectations have collapsed, we have entered the longest economic cycle in the US for 150 years and about a quarter of government bonds globally have a negative yield. Over the same period there have been dramatic advances in technology and changes in political conditions. Alongside this, there have been three major recessions (in most economies) and several financial crises.

Despite all the political, economic and social changes that have occurred since the mid-1980s, there have been repeated patterns in economies and financial markets. These patterns can be traced back over 100 years of market performance as financial market cycles react to, and anticipate, economic cycles. But they are also driven to some extent by changes in sentiment and psychology.

Understanding how humans process information and deal with both risks and opportunities can help to explain the existence of cycles in financial markets.

Although knowing where we are in a cycle in real time is difficult, and forecasting near-term returns is complex, there is useful information that investors can use to help them assess the risks and understand the probabilities of different outcomes.

The idea behind this book is not to present models that predict the future but rather to identify the signals and relationships between economic and financial cycles that tend to exist. I try to develop some practical tools and frameworks for assessing the risks and potential rewards as an investment cycle evolves, and highlight some of the indicators and warning signs that might point to a rising probability of an impending inflection point, either up or down, in market direction.

Finally, I try to identify ways in which some of the 'typical' relationships between economic and financial variables have changed over time and, in particular, since the financial crisis.

Recognising and understanding these changing conditions and how they affect investment opportunities can help investors to enhance their returns and, in equity markets in particular, enjoy a 'long good buy'.

The book is split into three parts:

- 1. Lessons from the past:** What cycles look like and what drives them
- 2. The nature and causes of bull and bear markets:** What triggers them and what to look out for
- 3. Lessons for the future:** A focus on the post-financial-crisis era; what has changed and what it means for investors

Part I starts with a description of some of the major changes that have taken place in economic conditions, politics and technology since the 1980s.

Chapter 1 describes how, despite these changes, bear markets, financial crises and crashes, bull markets and bubbles have come

and gone and familiar patterns have repeated themselves despite significantly varying circumstances. The chapter discusses the reasons for these cycles, including the impact of human sentiment and psychology.

Chapter 2 documents the longer-term returns that have been achieved in different asset classes and through specific holding periods, and examines the reward for taking risk. It describes the power of dividends in the total return for equities and also the key factors that tend to affect returns for investors.

Chapter 3 focuses on the tendency for equity bull and bear markets to be split into four phases – despair, hope, growth and optimism – and shows how each is driven by different factors with varying returns.

Chapter 4 looks at the pattern of returns across competing asset classes through a typical investment cycle.

Chapter 5 focuses on how equity investment styles or factors tend to evolve through the cycle.

Part II is a deeper dive into the nature, causes and implications of both bull and bear markets in equities.

Chapter 6 describes the different types of bear markets: cyclical, event-driven and structural, as well as the factors that can be used to identify bear market risks.

Chapter 7 describes the different types of bull markets and, in particular, the difference between secular rising bull markets and those that are more cyclical in nature – and why these differ.

Chapter 8 focuses specifically on bubbles and their characteristics, as well as identifying the common signposts that identify a developing speculative bubble.

Part III looks at how many of the fundamental factors and characteristics of the cycle have changed since the financial crisis of 2008/2009.

Chapter 9 focuses on the secular slowdown in profitability, as well as in inflation and interest rates. It discusses some of the lessons that can be learned from Japan and its post-1980s bubble experience.

Chapter 10 describes the impact and consequences of zero, or even negative, bond yields on returns and the cycle.

Chapter 11 is about the extraordinary shift in technology in recent years, its historical parallels and its impact on equity markets and the cycle.

Introduction

My first job as a trainee research analyst started at the end of 1985. Since then, many things in economies and society have changed beyond recognition. The world has become more interconnected; the Cold War ended and the Soviet Empire unravelled, heralding an era of ‘globalisation’. When I began my career, the UK had only recently, in 1979, removed restrictions on foreign exchange controls (for the first time in 90 years), while France and Italy still had them in place, only abolishing them in 1990.¹ Economic conditions have also transformed, and several key fundamental macro drivers have shifted dramatically: over the past three decades, inflation has fallen persistently and interest rates have collapsed; 10-year government bond yields in the United States have come down from over 11% to 2%, Fed funds rates have fallen from over 8% to 1.5% and currently one-quarter of all government

¹ Under European Community guidelines, France and Italy were required to end all exchange controls by 1 July 1990 but France implemented these six months earlier in order to show its commitment to the principles of free movement of goods, capital and people in Europe.

bonds globally have a negative yield. Inflation expectations have become well anchored and economic volatility has declined.

Meanwhile, technological innovations have also altered how we work and communicate, and computing power has revolutionised the ability to process and analyse data. The most powerful super-computer (the Cray-2) in 1985 had a similar processing ability to an iPhone 4.² The scale of the digital revolution and the quantity of available data since then would have been unimaginable at the time, and this seems to be accelerating. Microsoft's president Brad Smith recently signalled that 'this decade will end with almost 25 times as much digital data as when it began'.³

Over the same period, there have been three major recessions (in most economies) and several financial crises, including the US Savings & Loan crisis of 1986, the Black Monday stock market crash of 1987, the Japanese asset bubble and collapse between 1986 and 1992, the Mexican crisis of 1984, the Emerging Market crises of the 1990s (Asia in 1997, Russia in 1998 and Argentina in 1998–2002), the ERM currency crisis of 1992, the technology collapse in 2000 and, of course, the most recent global financial crisis, starting with the subprime mortgage and US housing declines of 2007, and the European sovereign debt crisis of 2010/2011.

Despite the huge changes in economic conditions and technology over the past three decades, and occasional financial and economic crises, there has been a tendency for similar patterns to repeat themselves in financial markets, and for cycles to emerge, albeit in slightly different forms. In a 2019 paper, authors Filardo, Lombardi and Raczo noted that, over the past 120 years, the US has gone through the Gold Standard period, when inflation was low, and the 1970s, when inflation was high and volatile, and that over this long historical period the price stability credentials of central banks has shifted and fiscal and regulatory policies have

² Stone, M. (2015). The trillion fold increase in computing power, visualized. Gizmodo [online]. Available at <https://gizmodo.com/the-trillion-fold-increase-in-computing-power-visualiz-1706676799>

³ Smith, B., and Browne, C. A. (2019). *Tools and weapons: The promise and the peril of the digital age*. New York, NY: Penguin Press.

varied considerably, but that ‘through all of this, the financial cycle dynamics have remained a constant feature of the economy’.⁴

It is these cycles, and the factors that drive them, that this book explores. Its purpose is to show that, despite significant changes in circumstances and environments, there still appear to be repeated patterns of performance and behaviour in economies and financial markets over time.

But, although acknowledging the changes, and trying to assess how much of the change we observe is cyclical and how much is structural, the main body of this book aims to examine what there is about financial markets that is predictable, or at least probable.

Interest in economic cycles, and their impact on financial markets and prices, has a long history and there are many theories on how they function. The Kitchin cycle, after Joseph Kitchin (1861–1932), is based on a 40-month duration, driven by commodities and inventories. The Juglar cycle is used to predict capital investment (Clement Juglar, 1819–1905) and has a duration of 7–11 years, whereas the Kuznets cycle for predicting incomes (Simon Kuznets, 1901–1985) has a duration of 15–25 years and the Kondratiev cycle (Nikolai Kondratiev, 1892–1938) has a duration of 50–60 years, driven by major technological innovations. There are, clearly, problems with all of them and the fact that there are so many different descriptions of cycles points to the fact that there are many different drivers. Several of them, such as the very long Kondratiev cycle, are difficult to test statistically given the existence of so few observations.

Although the traditional focus on cycles has related mainly to the economy, the focus in this book is on financial cycles, their drivers and different phases – a topic discussed in detail in chapter 3. The idea that there are cycles in financial markets in general, and in equity markets in particular, has been with us for a very long time. Fisher (1933) and Keynes (1936) both examined the interaction between the real economy and the financial sector in the Great

⁴ Filardo, A., Lombardi, M., and Raczko, M. (2019). Measuring financial cycle time. *Bank of England Staff Working Paper No. 776* [online]. Available at <https://www.bankofengland.co.uk/working-paper/2019/measuring-financial-cycle-time>

Depression. Burns and Mitchell found evidence of the business cycle in 1946 and later academics argued that the financial cycle was a part of the business cycle, and that financial conditions and private sector balance sheet health are both important triggers of the cycle and factors that can amplify cycles (Eckstein and Sinai 1986). Other research has demonstrated that waves of global liquidity can interact with domestic financial cycles, thereby creating excessive financial conditions in some cases (Bruno and Shin 2015).⁵

More recent studies suggest that measures of slack in the economy (or output gaps – the growth rate versus potential output) can be explained partly by financial factors (Boria, Piti and Juselius 2013) that play a large part in explaining fluctuations in economic output and potential growth, as well as ‘determining which output trajectories are sustainable and which are not’,⁶ thereby implying a close link and feedback loop between financial and economic cycles.

That said, although interest in economic and financial cycles has a long history, views on whether they can be predicted are widely contested. One set of ideas about the inability to anticipate future price movements in markets stems from the efficient market hypothesis (Fama 1970), which argues that the price of a stock, or the value of a market, reflects all of the information available about that stock or market at any given time; the market is efficient in pricing and so is always correctly priced unless or until something changes. Following on from this idea is the argument that an investor cannot really predict the market, or how a company will perform. This is because no individual will have more information than is already reflected in the market at any time, because the market is always efficient and prices change in fundamental factors (such as economic events) immediately.

But theory is one thing and practice is another. Nobel Laureate Robert Shiller, for example, showed that while stock prices are

⁵ Bruno, V., and Shin, H. S. (2015). Cross-border banking and global liquidity. *Review of Economic Studies*, 82(2), 535–564.

⁶ Boria, C., Disyatat, P., and Rungcharoenkitkul, P. (2019). What anchors for the natural rate of interest? *BIS Working Papers No 777* [online]. Available at <https://www.bis.org/publ/work777.html>

extremely volatile over the short term, their valuation, or price/earnings ratio, provides information which makes them somewhat predictable over long periods (Shiller 1980), suggesting that valuation at least provides something of a guide to future returns. Others have argued that the returns one can expect from financial assets are linked to economic conditions and therefore the probability of certain outcomes can be assessed even if accurate forecasts are not particularly reliable.

Although there are relationships between financial cycles and economic cycles, mainly because bonds are affected by inflation expectations and equities by growth, there are some patterns of human behaviour that reflect and sometimes amplify expected economic conditions. It is the way in which economic and corporate fundamentals (expected growth, profit, inflation and interest rates, for example) are perceived by investors that is the crucial mix. Academic work has increasingly shown that risk-taking appetite has been a key channel through which supportive policy (for example, low interest rates) can affect cycles (Borio 2013).⁷ Willingness to take risk and periods of excessive caution (often after a period of weak returns) are factors that tend to amplify the impact of economic fundamentals on financial markets and contribute to cycles and repeated patterns.

The emotions of fear and greed, of optimism and despair, and the power of crowd behaviour and consensus can transcend specific periods of time or events, supporting the tendency for patterns to be repeated in financial markets even under very different circumstances and conditions. There is also a tendency for errors to be repeated when investors fail to heed some of the important warning signals of overheating and excess that can develop when conditions are supportive and there is a powerful narrative. I discuss this topic in chapter 8, which looks at the role of sentiment in developing speculative excesses and financial bubbles.

⁷ Borio, C. (2013). On time, stocks and flows: Understanding the global macroeconomic challenges. *National Institute of Economic and Social Research*, 225(1), 3–13.

Of course, although there are repeated patterns in markets over time, there are also events and economic conditions that are unique to each cycle or circumstance. In reality, no two periods are ever precisely the same; even faced with fairly similar conditions, the precise permutations of factors are unlikely to be repeated in the same way. Structural changes in industries and in economic factors, such as inflation and the cost of capital, can shift relationships between variables over time. For example, the behaviour and performance of a stock market cycle in an era of high inflation and interest rates could well be rather different from a cycle in a period of very low inflation and interest rates, and the way in which companies, investors and policymakers react to a given impulse may change over time as they adapt to the experiences of the past.

It is also important to recognise that when we look for relationships between factors and variables in history we are enjoying the benefit of hindsight. We can recognise patterns after they exist, whereas in real time this can be a great deal more difficult. This is, in part, what makes consensus and crowd behaviour so important in driving fluctuations in asset prices. For example, when economic data are expected to slow and stock prices weaken, it is unlikely to be obvious at the time whether this represented a 'mid-cycle' slowdown and a correction, or whether this was the start of a much more serious bear market and recession; this can only be known for sure in retrospect. Certainly, it is not uncommon for financial markets to 'overprice' an expected shift in future economic conditions, and this is one reason why market cycles and inflection points in particular can be so sharp. But the greater swings that tend to exist in financial markets, relative to economies, do not weaken the relationships between them. The fact that links exist between stock returns and prospective growth can at least help us to understand the typical leads and lags, varying strengths of relationships between variables and the signals to look for.

Understanding the dynamics of cycles, and what variables may have changed, may help us to make more informed investment decisions and make risk management more effective. As Howard Marks, the co-chairman and cofounder of Oaktree Capital Management,