INVESTING THROUGH THE CAPITAL CYCLE A MONEY MANAGER'S REPORTS, 2002-15

CAPITAL RETURNS

EDITED WITH AN INTRODUCTION BY EDWARD CHANCELLOR

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Wall Street's Wheel of Fortune (illustration by David Foldvari)

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EDWARD CHANCELLOR





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FOREWORD

Marathon Asset Management LLP¹ will shortly celebrate its 30th birthday. Over three decades, our investment philosophy has evolved, but two simple ideas about how capitalism works have always been paramount.

The first notion is that high returns tend to attract capital, just as low returns repel it. The resulting ebb and flow of capital affects the competitive environment of industries in often predictable ways – what we like to call the capital cycle. Our job has been to analyze the dynamics of this cycle: to see when it is working and when it is broken, and how we can profit from it on behalf of our clients. The second guiding idea is that management skill in allocating capital is vital over the long-term. Picking managers who allocate capital in sensible ways is crucial to successful stock selection. The best managers understand the capital cycle as it operates in their industries and don't lose their heads in the good times.

We found that the kind of opportunities created by capital cycle analysis often have long gestation periods, as the timing of the pay-off was highly uncertain. As a result, we discovered that our approach has worked best when we invested in a relatively large number of stocks, holding onto them for long periods of time. This rather goes against the grain of our industry where the preference has been to hold concentrated portfolios, confirming a fund manager's conviction in his or her ideas, albeit for shorter and shorter periods of time.

While we have sometimes struggled to explain our stance to consultants and other professionals in the financial services arena, it has always proved easier when it came to our clients. The latter – pension funds, state funds, foundations and endowments, predominantly in the United States – are often staffed by individuals with experience of working in non-financial businesses. A common refrain from them when explaining our process is "that's just common sense." Fortunately for us, these ideas about how the capital cycle operates and how management allocates capital are not widely followed by our own competitors in the investment industry. This throws

¹ Trading under the name of Marathon-London in the United States.

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up investment opportunities for us around the world. While we have made innumerable errors over the years, our overall record in terms of relative performance has been favourable.

Furthermore, the investment approach has fared well under conditions of extreme stress and market madness. The Asian Crisis of the late 1990s and the technology, media and telecoms (TMT) bubble of the turn of the millennium were documented in our last collection of essays, *Capital Account*.² Since 2004, the principal stress test was the long run up to, and calamitous aftermath of, the Global Financial Crisis (GFC). The challenges this posed for fund managers is the main story of this book. We were responsible for numerous howlers – catching "falling knives" from the detritus of both the TMT bubble and the GFC, as well as numerous errors of judgment when it came to picking management teams. Our hall of shame includes the likes of Bear Stearns, Bradford & Bingley, Blockbuster, MBIA, HMV etc., etc. Nevertheless, overall performance has been gratifying, giving us confidence in the robustness of the investment philosophy.

This good fortune is matched by our success in persuading Edward Chancellor to reprise his role as editor of this volume of essays taken from the period 2002–15, as well as to write an insightful introduction. We thank him, along with Marathon's employees, past and present, for their role in building this firm and creating this book.

Neil Ostrer, Founding Member William Arah, Founding Member June 2015

² Edward Chancellor (ed.), Capital Account: A Money Manager's Reports on a Turbulent Decade 1993–2003 (2004).

PREFACE

Capital Returns appears just over a decade after the publication of Marathon's previous publication, Capital Account, which I also had a hand in editing. This new work is arranged along the same lines as its predecessor. The pieces here have been selected from the firm's Global Investment Review, which appears eight times a year and typically contains six essays of around 1,500 words in length. The review, or GIR as it is known in-house, is written to inform Marathon clients of the firm's investment approach and to provide real-time insights into developments in the investment world.

The essays collected in the current volume have been chosen because they exemplify Marathon's capital cycle investment philosophy, which Marathon believes to be of some interest to the wider investing public (and perhaps even the odd economist if any can bring himself or herself to read a book devoid of equations and mathematical models). The process of selection inevitably leads to what is known in the investment world as "survivorship bias": those essays which haven't survived the test of time, or have turned out to be plain wrong, have been jettisoned, while the better investment calls have largely avoided the cull. The result is to make Marathon appear more clairvoyant than is actually the case – one could quickly put together a far larger volume of duff pieces! My intention has not been to flatter the authors' prescience, but rather to find interesting examples of capital cycle analysis, as applied by Marathon's analysts over the past decade.

As before, I have been given a free hand in editing and have employed the same technique as formerly. Namely, I have edited the text to make it read more fluently than when it first appeared. Editing a text long after it has been written necessarily involves some hindsight bias. This diminishes to some extent the integrity of *Capital Returns* as original source material. My aim, however, has been to draw out the capital cycle analysis as clearly as possible without changing the meaning of the original piece.

The authors of the essays in this collection are (in alphabetical order): Charles Carter, David Cull, Mike Godfrey, Jeremy Hosking, Nick Longhurst, Jules Mort, Michael Nickson, Neil Ostrer, James Seddon, Nick Sleep, Mike

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Taylor, Simon Todd and Qais Zakaria. I have received even more help putting together *Capital Returns* than with the earlier volume. Simon Todd valiantly started out the selection process, which in many ways is the most arduous aspect of the job (there were over 600 essays from which to pick). Quentin Carruthers undertook the initial sub-editing. William MacLeod has assisted with many of the footnotes. Nicola Riley has helped on the administrative side, printing off numerous drafts and sending me countless files. Bridget Hui kindly checked the proofs. As with *Capital Account*, the present volume is largely the product of my friend and former colleague Charles Carter. It has been a pleasure working with him again.

Edward Chancellor June 2015

INTRODUCTION

This book contains a collection of reports written by investment professionals at Marathon Asset Management. What makes these reports stand out, in my opinion, is an analytical focus on the ebb and flow of capital. Typically, capital is attracted into high-return businesses and leaves when returns fall below the cost of capital. This process is not static, but cyclical – there is constant flux. The inflow of capital leads to new investment, which over time increases capacity in the sector and eventually pushes down returns. Conversely, when returns are low, capital exits and capacity is reduced; over time, then, profitability recovers. From the perspective of the wider economy, this cycle resembles Schumpeter's process of "creative destruction" – as the function of the bust, which follows the boom, is to clear away the misallocation of capital that has occurred during the upswing.

The key to the "capital cycle" approach – the term Marathon uses to describe its investment analysis – is to understand how changes in the amount of capital employed within an industry are likely to impact upon future returns. Or put another way, capital cycle analysis looks at how the competitive position of a company is affected by changes in the industry's supply side. In his book, *Competitive Advantage*, Professor Michael Porter of the Harvard Business School writes that the "essence of formulating competitive strategy is relating a company to its environment." Porter famously described the "five forces" which impact on a firm's competitive advantage: the bargaining power of suppliers and of buyers, the threat of substitution, the degree of rivalry among existing firms and the threat of new entrants. Capital cycle analysis is really about how competitive advantage changes over time, viewed from an investor's perspective.

¹ Michael Porter, Competitive Strategy (1980), p. 3. See also Capital Account, pp. 6-7.

A STYLIZED CAPITAL CYCLE

Here's how the capital cycle works. Imagine a widget manufacturer – let's call it Macro Industries. The firm is doing well; so well, that its returns exceed Macro's cost of capital. The firm's CEO, William Blewist-Hard, has recently featured on the front cover of *Fortune* magazine. His stock options are in the money, and his wife no longer complains about being married to a boring industrialist. Of the nine investment bank analysts who cover Macro's stock, seven have buy recommendations and two have holds. The shares are trading at a price-earnings multiple of 14 times, below the market average. Macro's stock is held by several well-known value investors.

Macro's strategy department anticipates strong demand growth for its products, especially in emerging markets where widget consumption per capita is less than one-tenth the level found in the advanced economies. After discussions with the board, Macro's CEO announces his plans to increase manufacturing capacity by 50 per cent over the next three years in order to meet growing demand. A leading investment bank, Greedspin, arranges the secondary share offering to fund the capital expenditure. Stanley Churn of Greedspin, a close friend of Macro's Blewist-Hard, is the lead banker on the deal. The expansion is warmly received in the FT's Lex column. Macro's shares rise on the announcement. Growth investors have lately been buying the stock, excited by the prospect of rising earnings.

Five years later, Bloomberg reports that Macro Industries' chief executive has resigned after longstanding disagreements over corporate strategy with a group of activist shareholders. The activists, led by hedge fund Factastic Investment, want Macro to shutter under-performing operations. Macro's profits have collapsed, and its share price is down 46 per cent over the last twelve months. Analysts say that Macro's problems stem from over-expansion – in particular, its \$2.5bn new plant in Durham, North Carolina, was delayed and over budget. The widget market is currently in the doldrums, suffering from excess supply. Macro's long-established competitors have also increased capacity in recent years, while a number of new low-cost producers have also entered the industry, including Dynamic Widget, whose own shares have disappointed since its IPO last year.

The market for widgets is suffering from the recent slowdown in emerging markets. China, the world's largest consumer of widgets, has vastly expanded domestic widget production over the last decade and has lately become a net exporter. Macro is reportedly considering a merger with its largest rival. Although its stock is trading below book, analysts say there's

little near-term visibility. Of the remaining three brokerages that still cover Macro, two have sell recommendations with one hold.

The ups and downs of this fictional widget manufacturer describes a typical capital cycle. High current profitability often leads to overconfidence among managers, who confuse benign industry conditions with their own skill – a mistake encouraged by the media, which is constantly looking for corporate heroes and villains. Both investors and managers are engaged in making demand projections. Such forecasts have a wide margin of error and are prone to systematic biases. In good times, the demand forecasts tend to be too optimistic and in bad times overly pessimistic.

High profitability loosens capital discipline in an industry. When returns are high, companies are inclined to boost capital spending. Competitors are likely to follow – perhaps they are equally hubristic, or maybe they just don't want to lose market share. Besides, CEO pay is often set in relation to a company's earnings or market capitalization, thus incentivizing managers to grow their firm's assets. When a company announces with great fanfare a large increase in capacity, its share price often rises. Growth investors like growth! Momentum investors like momentum!

Investment bankers lubricate the wheels of the capital cycle, helping to grow capacity during the boom and consolidate industries in the bust. Their analysts are happiest covering fast-growing sexy sectors (higher stock turnover equals more commissions.) Bankers earn fees by arranging secondary issues and IPOs, which raise money to fund capital spending. Neither the M&A banker nor the brokerage analysts have much interest in long-term outcomes. As the investment bankers' incentives are skewed to short-term payoffs (bonuses), it's inevitable that their time horizon should also be myopic. It's not just a question of incentives. Both analysts and investors are given to extrapolating current trends. In a cyclical world, they think linearly.

The Macro example also shows the lag between a rise in capital spending and its impact on supply, which is characteristic of the capital cycle. The delay between investment and new production means that supply changes are lumpy (i.e., the supply curve is not smooth, as portrayed in the economics textbooks) and prone to overshooting. In fact, the market instability created by lags between changes in supply and production has long been recognized by economists (it is known as the "cobweb effect").

The capital cycle turns down as excess capacity becomes apparent and past demand forecasts are shown to have been overly optimistic. As profits collapse, management teams are changed, capital expenditure is slashed, and the industry starts to consolidate. The reduction in investment and contraction in industry supply paves the way for a recovery of profits. For an

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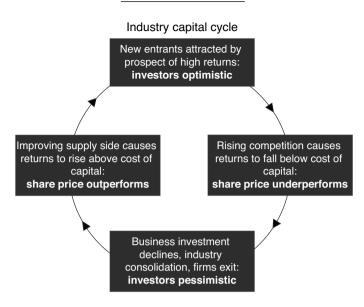


Chart I.1 The capital cycle *Source*: Marathon.

investor who understands the capital cycle this is the moment when a beaten down stock becomes potentially interesting. However, brokerage analysts and many investors operating with short time horizons generally fail to spot the turn in the cycle but obsess instead about near-term uncertainty.

SOME RECENT CAPITAL CYCLES

The capital cycle described above might seem rather simplistic and contrived. Yet it is surprisingly common. Some industries, such as the semiconductor and airline industries, are particularly prone to violent capital cycles, resulting in frequent bouts of excess capacity and generally disappointing investment returns.² We have witnessed this boom-bust process in many other sectors in recent years. Marathon's earlier book, *Capital Account*, described the mistaken demand forecasts and overinvestment which accompanied the TMT bubble of the late 1990s.

During the tech boom, many telecoms companies operated on the mistaken assumption that Internet traffic was doubling every 100 days. This forecast was used to justify enormous capital spending by the likes of WorldCom, Global Crossing and a host of long-forgotten "alternative carriers" (as the

² For more on the semiconductor cycle, see below 2.6 "Escaping the semis' cycle."

minor telecoms players were then known). After the bubble burst, the misal-location of capital was revealed and, for several years afterwards, telecoms networks were plagued with massive excess capacity (known as "dark fibre," as much of the networks' expensively laid fibre optic cable remained unlit.)

Following the dotcom bust, a number of capital cycles appeared across a variety of industries. The global shipping industry provides a classic example.³ Between 2001 and 2007, daily rates for "Panamax" class ships rose tenfold as China's rapidly increasing share of global trade boosted shipping demand. New orders in the shipbuilding industry are strongly correlated with daily spot rates. The supply response was inevitable if not immediate – it takes up to three years for a new ship order to be delivered. Between 2004 and 2009, however, the global dry bulk fleet doubled from 75 to 150m deadweight tonnes.⁴ The effect of this new supply combined with the global slowdown resulted in a 90 per cent fall in Panamax daily rates, which wiped out all the gains from earlier in the decade. An investor who bought into shipping in the summer of 2007, before the onset of the global financial crisis, would have lost two-thirds of his money. Shares in global shipping companies, such as Denmark's Maersk Group, were down a similar amount. New ships, which had been ordered during the boom years, continued to be delivered long after the downturn. At the time of writing, the shipping industry is still suffering from poor capacity utilization and low rates.

Rising house prices after 2002 prompted another capital cycle in the US homebuilding industry. By the time the US housing bubble peaked in 2006, the excess stock of new homes was roughly equal to five times the annual production required to satisfy demand from new household formation. Spain and Ireland, whose real estate markets had even more pronounced upswings, ended up with excess housing stocks equivalent to roughly 15 times the average annual supply of the pre-boom period. Whilst under way, housing booms are invariably justified by references to rosy demographic projections. In the case of Spain, it turned out that recent immigration had largely been a function of the property boom. After the bubble burst and the Spanish economy entered a depression, foreigners left the country by the hundreds of thousands.

³ See "Waves in Ship Prices and Investment," by Robin Greenwood and Samuel Hanson, NBER Working Paper, 2013.

⁴ "Shipping Sector Report: Supply Finally Conquered but will Spot Rates be Liberated?," DNB Markets, 8 April 2013.

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Several well-known "value" investors who ignored capital cycle dynamics were blindsided by the housing bust. In the years before US home prices peaked in 2006, homebuilders had grown their assets rapidly. After the bubble burst, these assets were written down. As a result, investors who bought US homebuilders' stocks towards the end of the building boom when they were trading around book value – towards their historical lows – ended up with very heavy losses. From a capital cycle perspective, it's interesting to note that although UK and Australia experienced similar house price "bubbles," strict building regulations prevented a supply response. Largely as a consequence, both the British and Australian real estate markets recovered rapidly after the financial crisis. 6

THE COMMODITY SUPERCYCLE

The commodity "supercycle," as the brokers called it, took off in the period of low interest rates following the dotcom bust of 2002 (see below, 1.3 "This time's no different" and 1.4 "Supercycle woes"). Rising prices for commodities were propelled by China, whose investment-heavy economy was experiencing consistent double digit annual GDP growth. After the financial crisis, China's investment share of GDP rose even further to some 50 per cent of GDP, a higher level than seen before in any other economy. By 2010, China accounted for more than 40 per cent of global demand for a number of commodities, including iron ore, coal, zinc and aluminium. China's share of incremental demand for these commodities was even higher. The prices of these commodities and several others were far above their historic trends, arguably at bubble levels. 8

⁵ For instance, the large US homebuilder KB Home experienced a 28 per cent compound annual growth in assets between 2001 and 2006. By summer of 2006, its shares were trading at 1.2 times book. From that point, KB's book value declined by 85 per cent, and its shares, already well below their peak, fell a further 75 per cent.

⁶ The fact that UK housing supply didn't respond to the British housing bubble is reflected in the superior performance of UK homebuilding stocks relative to their US counterparts over the last decade.

⁷ Sanford C. Bernstein estimates that China contributed 92 per cent of total growth in iron ore consumption between 2000 and 2013. See "US Metals and Mining: Super-cycle ... Where is the Super-Cycle?," July 2014.

⁸ At the Boston-based investment firm GMO, my former employer, we defined an asset price bubble as a two-standard deviation from trend. By 2010, iron ore was 4.9 s.d. above trend, copper 3.9 s.d., coal 4.1 s.d., zinc 1.9 s.d. and aluminium 1.4 s.d. See Jeremy Grantham, "The Time to Wake Up: Days of Abundant Resources and Falling Prices Are Over Forever," GMO, April 2011.

As the price of commodities rose, the profitability of global mining companies took off. Their return on capital employed rose from around 7.5 per cent at the turn of the century to peak at nearly 35 per cent in 2005, rebounding after the financial crisis to around 20 per cent. Even after the Lehman bust, most analysts extrapolated recent commodity demand growth into the distant future on the grounds that China's economy was destined to converge with, and eventually overtake, the mighty US economy. This combination of high commodity prices, strong profitability and robust expected future demand spurred the miners to increase production.

Annual global mine production (in USD terms) rose by 20 per cent annually between 2000 and 2011, more than half of this growth coming from iron ore and coal. In volume terms, iron ore production doubled over the same period. Mining capital expenditure climbed more than fivefold, from around \$30bn a year at the turn of the century to peak at over \$160bn. Changes in iron ore supply materialize after a long lag – it takes up to nine years to develop a greenfield site. New supply is particularly lumpy owing to the huge size of some of the new mines – Vale's Serra Sul project in Brazil, which had a capex budget of nearly \$20bn, is expected to add nearly 5 per cent to global iron ore production.

During the years of rocketing commodity prices, supply also came on stream from non-traditional producers, including Iran and parts of Africa. Although the global mining industry is concentrated among a handful of major players, competition has been fierce – Australia's Fortescue Metals Group, a relative newcomer, expanded aggressively to become the 4th largest iron producer by 2011. Many smaller mining companies came to the market, including a number of rather dubious foreign outfits floated on the London Stock Exchange. High prices also increased the supply of scrap metal.

The commodity supercycle appears to have turned in 2011, roughly coincident with a slowdown in China's growth rate. By April 2015, the price of seaborne iron ore was down roughly 70 per cent from the peak (in USD terms). New mining capacity, commissioned when prices were high, is destined to come on stream for the next several years, contributing further to

⁹ "A Long Lasting Mining Capex Correction," UBS, June 5, 2014.

¹⁰ See Bernstein, op. cit.

The ratio of the miner's capex to depreciation, which rose from 1.1x in 2001 to peak at 3x in 2012, UBS, ibid.

¹² On a 12-month basis, global junior and mid-tier equity raisings in the mining sector went from just \$1bn in 2005 to \$30bn by mid-2011, falling back to around \$2bn by early 2014 (Bernstein, ibid.).

 $^{^{13}}$ Scrap metal consumption rose from 401m to 573m metric tonnes, between 2000 and 2011.

overcapacity.¹⁴ The profitability of the global miners has declined in tandem with commodity prices, and their shares have underperformed.¹⁵ Thus, the great commodity supercycle bears the hallmarks of a classic capital cycle: high prices boosting profitability, followed by rising investment and the arrival of new entrants, encouraged by overly optimistic demand forecasts; and the cycle turning once supply has increased and demand has disappointed.

THE CAPITAL CYCLE ANOMALY

So much for some recent anecdotal evidence in support of the capital cycle approach. What do the finance professors have to say? When I wrote the introduction to Marathon's *Capital Account* just over a decade ago, little academic work had been published on this subject. More recently, however, a number of papers have appeared, observing an inverse relationship between capital expenditure and investment returns. Firms with the lowest asset growth have outperformed those with the highest asset growth, as the chart from Société Générale strategist Andrew Lapthorne shows (see Chart I.2).

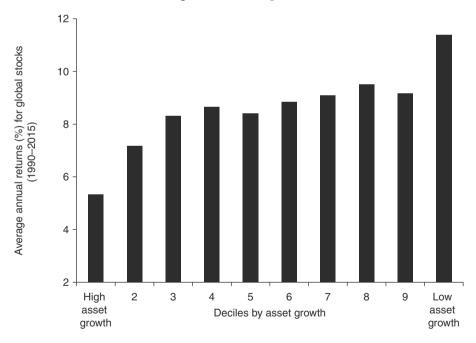


Chart I.2 Asset growth and investment returns Source: SocGen.

¹⁴ A recent research note from Sanford C. Bernstein (*supra*) suggested that potential new capacity in the pipeline amounted to 50 per cent of current global iron ore production.

Fortescue's share price fell 44 per cent in the five years to June 2015.

Modern finance theory is based on the notion that while markets are efficient, certain "factors" – namely, size, value and momentum – have historically beaten the benchmark index. Nobel laureate Eugene Fama and his colleague Ken French have suggested adding two more factors to their model: profits and investment. With regards to the capital cycle, Fama and French observe that companies which have invested *less* have delivered higher returns. This finding has been termed the "asset-growth anomaly." A paper in the *Journal of Finance* reports that corporate events associated with asset expansion – such as mergers & acquisitions, equity issuance and new loans – tend to be followed by low returns. Conversely, events associated with asset contraction – including spin-offs, share repurchases, debt prepayments and dividend initiations – are followed by positive excess returns. The negative impact on shareholder returns from expanding corporate assets was found to persist for up to five years.

The *Journal of Finance* authors conclude that firm asset growth is a *stronger* determinant of returns than traditional value (low price-to-book), size (market capitalization), and momentum (both long and short horizon). Other finance economists have found that companies often accelerate investment after their stocks have done relatively well and that these same companies later underperform. This suggests that asset growth may explain the phenomenon of momentum reversal.¹⁸

In short, recent research is edging towards the conclusion that the excess returns historically observed from value stocks and the low returns from growth stocks are not independent of asset growth. This leads to a key insight of the capital cycle investment approach: when analyzing the prospects of both value and growth stocks, it is necessary to take into account asset growth, at both the company and the sectoral level. One researcher goes so far as to claim that the value effect disappears after controlling for capital investment.¹⁹

¹⁶ Eugene Fama and Kenneth French, "A Five-Factor Asset Pricing Model," Working Paper, September 2014.

¹⁷ Michael Cooper, Huseyin Gulen, and Michael Schill, "Asset Growth and the Cross-Section of Stock Returns," *Journal of Finance*, 2008. See also, Sheridan Titman, John Wei and Feixue Xie, "Capital Investment and Stock Returns," *Journal of Financial and Quantitative Analysis*, 2004; Yuhang Xie, "Interpreting the Value Effect through Q-Theory: An Empirical Investigation," Working Paper, 2007; and S.P. Kothari, Jonathan Lewellen, and Jerold Warner, "The Behavior of Aggregate Corporate Investment," Working Paper, September 2014.

¹⁸ Christopher Anderson and Luis Garcia-Fijóo, "Empirical Evidence on Capital Investment, Growth Options, and Security Returns," *Journal of Finance*, 2006.

¹⁹ Xie, ibid.