SECURITY VATITATION AND RISK ANALYSIS

Assessing Value in Investment Decision Making

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This book is printed on acid-free paper.

This book has taken me almost four decades to write. And that makes the task of writing this Preface so difficult. If I might, I would like to offer some simple but hopefully helpful advice and insight into this profession: Learn from anyone and everyone. You'll be surprised what information you can glean about business from about anyone you might meet. Ask about their job, what (if not nonpublic and material) their company could be doing to become more efficient, what it might be doing wrong or well, as well as the firm's customers, clients, and competition.

While all security analysts like to spend time with the chief financial officer (CFO), in a large organization it's really the professionals that report to the CFO who carry the valuable information and expertise. For instance, if possible, I like to speak to the individual who wrote particular footnote sections of the 10K or 10Q, such as the manager of global tax or the pension manager.

The chief motivational factor over the course of my professional career has been my desire to learn and experience all there was when it came to analyzing stocks. A good security analyst always should seek out individuals from whom to learn, books to study, and schools and conferences from which to receive training. An analyst must use his or her resources and ask sound questions based on an understanding of the subject or an obvious quest for such an understanding. As a young analyst, I chaired the Education Committee at the New York Society of Security Analysts, so I had access to high-ranking individuals whom I could invite, visit with, and learn from.

An analyst needs to be as inquisitive as a police detective—and as probing and as suspicious. An analyst never should get complaisant during bull markets or be so doubting during bear markets as to lose sight of the long-term opportunities.

Having heard countless Depression-era stories from my father, I came into the investment business with a congenital concern that a business might not be able to provide its owners with sufficient cash to warrant an investment. And the ever-increasing list of scandals and abuses only tended to raise my level of suspicion.

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It was with this background that I began, during the 1970s, the study of cash flow and credit, during which I spent several years as a loan officer.

As the growth in U.S. corporate pension funds became apparent, I worked as the pension fund analyst for a large utility company, where I delved into actuarial methodologies, which was an arcane science at the time. The United States was going through a very difficult recession, yet stocks were, for the most part, being valued on growth of earnings, even though the owners of companies, the shareholders—who were hoping for some capital gains—discovered that there was little excess cash to be distributed. Mergers were being completed for stock under pooling of interest accounting, which allowed the assets and liabilities to be recorded at their carrying values. By artificially boosting earnings through avoidance of goodwill, this made for lower P/Es, but again providing no distributable cash.

As I delved into the minutiae of corporate reporting, it became apparent to me that many firms were wasting cash, either through excessive hiring, wasteful acquisitions of other firms, or unneeded expansion fueled by top-of-cycle decisions. These firms had just an outside chance of earning a decent return on their investment, not to mention the downside risk if the investment didn't turn out as planned. One public company chairman once told me he was in a "transactions mode" and wound up almost bringing down the whole company from the eventual deal. His investment bankers were quite happy as they left his office that day. It was from experiences such as these that I learned that a company must have a cash return at least equal to its cost of capital.

Now that the industrialized world is entering its second decade of slowing economic growth, the analysis of cash flow and credit is coming to the forefront. With that Depression mentality in mind, I explain in this book my concept for how the entity can maximize free cash flow without impairing its growth. For without free cash flow, outside of selling assets, principal on debt cannot be reduced, and investors cannot be compensated.

The reason for this book, however, is my genuine concern that investors have not learned to program risk into their expectations. Even when they believe that they have, normally omitted are a multitude of factors that deserved careful attention but did not receive it. Without a careful assessment and evaluation of fundamental business and operating risks, the potential for negative surprise looms. When building in such risks to expectations of reward in the form of cash flow, a superior investment model is created, including the estimate of fair value.

Any success this text may enjoy is made possible through my personal relationships with professionals whose aim is the advancement of the profession. Here I had the aid of some wonderful individuals and corporations.

I received great encouragement from my parents, David and Bernice Hackel, both of whom believed in the power of knowledge and of the people who continually strive for that "better" world.

I was lucky to have the great support of my wife, Gail, to whom this book is dedicated. Gail spent many weekends and evenings without me as I performed research and typed away.

I am also indebted to Eli Hackel, CFA, for his feedback and analysis regarding several portions of the text.

While the parents instill confidence in their children, the children often do the same for the parents. My Emily, Eli, Betsy, and David have done so for me.

I am extremely grateful to Simon Adams at CT Capital, LLC, who was with me on the project from day one. Simon helped to prepare most of the charts and tables in this book and is a whiz in Excel, Word, and whatever software is necessary for the preparation of financial text. He is also a friend I have come to admire and respect.

To my friends at McGraw-Hill, I am most impressed. Here I speak particularly of Jennifer Ashkenazy, Mary Glenn, and Knox Huston. I relied on you, and you all came through. I have been with your company as an author for almost 20 years. As you know, authors need lots of encouragement, and you were there for me and provided the resources I needed when I needed them.

I must not forget the years of friendship, encouragement, and help from my former editor, Ralph Rieves, now a managing director at Farragut, Jones and Lawrence. It was Ralph who first broached the idea of me writing a book some 20 years ago, and it was he who urged me, after hearing my ideas, to bring this project forward. Ralph, this turned out to be a project of joy and learning—you were right!

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To the remarkable folks at the Financial Accounting Standard Board, popularly known as FASB, I thank you all for your help and research efforts. Their job is not an easy one, being pulled from one side by investors seeking more information and tugged from the other side by firms who wish to protect themselves or not pay their freight. At the FASB, I would particularly like to thank Marc Siegal, board member, and Nicholas Cappiello, as well as all their assistants and researchers.

At Fitch Ratings, I appreciated the fine help of Cindy Stoller, who provided me with access and information that was included in this book.

To Alan Spen, former senior director at Fitch and now a consultant, your capital insights and text feedback are truly appreciated. Alan has been as exceedingly generous with his time and his revelations, and I consider him a good friend.

At Research Insight I must pay homage to John Kim, whom I was free to call evenings and weekends. John is one of the finest financial programmers I have known. For John, no assignment was too big or too complex.

To the people at the Institute of Chartered Financial Analysts, who are responsible for the issuance of the Chartered Financial Analyst (CFA) designation, I can see why the pursuance of the degree has flourished. I have long maintained that I learned more about security analysis from the CFA program than from graduate school. I highly encourage any serious student of finance and security analysis to pursue the CFA.

Many of the CFOs and CEOs I had spoken with in the book's preparation and who have provided insight have preferred that they not be given attribution. Their feedback will always be appreciated.

And finally, I would like to acknowledge anyone who reads this text. I am confident that you will be a better investor for having done so and for embracing the principles of cash flow and risk in your financial decision making.

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Overview

Security Valuation and Risk Analysis is a book written to help investors appraise the expected return from an investment in an equity security. In undertaking this endeavor, half this book is allocated to risk, as measured by cost of capital, and half is allocated to to return, as measured by the investment's expected cash flows.¹

Many new lessons were taught and many old lessons were learned as a result of the financial system meltdown of 2008–2009, but none more important than possessing the deep skill set to practice the rigorous application of cash flows and credit analysis. The investors having such a deep-seated knowledge were, in many instances, able to earn outsized returns while avoiding the concerns that were forced into bankruptcy or forced to accept government aid. Many other entities were severely weakened, with massive loss of market share. And when the economy stabilized, the firms that had strong cash flows and low cost of capital quickly rebounded to their former levels, and over the course of a business cycle, such enterprises normally outperform the general equity market by a considerable margin.

Investors who understand cash flow and credit have an important competitive advantage. They can place a confident value on the enterprise and spot discrepancies in value. To the extent that economic uncertainty is prevalent, investment opportunities are especially widespread. Those who succeed in this environment are those who are best equipped with the new analytic skills to do so. Successful investors understand cash-flow adequacy is the most important benchmark in both security valuation and credit decisions; they also understand there are risks associated with expected cash flows.

¹Throughout the text, I refer to cash flows as meaning **both** cash flow from operating activities and free (maximum distributable) cash flow. Otherwise, they are referred to separately, as will be defined.

This book will provide you with the tools designed to give you a real edge relative to other security analysts by demonstrating how you can

- Enhance your forecasting skills by showing how to spot and take advantage of early-warning signals provided by cash-flow and credit metrics
- · Have a better understanding of how financial statements are prepared
- Take advantage of a better definition of cost of equity capital from which to discount free cash flow
- Capitalize on a better definition of free cash flow by understanding how management could free up cash resources
- Earn superior investment returns through practical use of an advanced definition of cash flow from operating activities that is superior to that reported under generally accepted accounting principles (GAAP)
- Spot and quantify important balance-sheet and off-balance-sheet items that most often are neglected or lightly scrutinized by securities analysts and investors
- Think like a corporate "insider" by showing how corporate executives view the various risks that confront them
- Take advantage of the many failings of earnings before interest, taxes, depreciation, and amortization (EBITDA)
- Take advantage of how rating agencies assign credit grades

To say that much has developed in the world of finance since I cowrote Cash Flow and Security Analysis (2nd ed., McGraw-Hill, 1995) with distinguished Professor at the Stern School of Business, Dr. Joshua Livnat, would be a very gross understatement. Who knows how close the United States, and, for that matter, the industrialized world, came to financial collapse during the fall of 2008?

What can be stated with complete and utter confidence is the study of cash flow and credit has become more important than ever. It is with this perspective that I produced this book.

Investments—and their study—are a living, changing experience. What we take for granted one day may not be so certain the next. And thus we must adapt, even when our central rule makers, the Securities and Exchange Commission (SEC) and the Financial Accounting Standards Board (FASB²), are slow to do the

²Accounting promulgations in the United States are issued by the Financial Accounting Standards Board (FASB), a Norwalk, CT-based private organization that is officially recognized by the U.S. government and the accounting profession as the rule-making body. Any company with publicly traded stock or bonds must comply in full with GAAP, which means complying with the FASB's regulations.

Overview 3

same. The U.S. Congress also operates with a lag, normally reacting to events by swinging too hard and too late.

At other times, as we have seen, accounting rule makers are forced to refine accounting standards that have stood for many years, reacting to events of the moment, in order to satisfy investors in problem sectors. We have witnessed the public weigh in, voicing support for modification of existing accounting standards, supported by a Congress feeling the heat of the voters.

Let me state with authority what this book is *not*. It is *not* a text written for or designed to appeal to academic statisticians who practice money management. This book is for *practitioners* of security analysis. I have seen more than a couple of Nobel Prize—winning scholars run gigantic hedge funds into the ground with their theories. I have been through too many once-in-a-hundred-years events.

The great investors throughout time started, built, or acquired companies whose products enjoyed consistent and growing free cash flow. By relying on financially prudent business practices, their companies enjoyed a low cost of capital. They created a competitive advantage and did not deviate. And if they did deviate, more often than not, they ran into trouble. I never hear successful builders of businesses mention beta or other academic statistical risk tools. They talk about products, customers, risk, and cash. They talk about growth rates in free cash flow, taxes, and stability. This is how the reader will be taught to measure return and risk in this book.

This book is *not* centered on financial companies, although I will provide many detailed examples and explanations of financial instruments, including why it is important to monitor creditors with whom the industrial entity relies on for financial backing.

While I am painfully aware of how problems in the financial sector spilled over to the rest of the economy, banks and insurers have investment accounts equal to many times their shareholders' equity, and it is too often those assets that drive valuations and stock prices. If their investments are overstated, their reserves understated, or their commitments, contingencies, or hedges in trouble, their valuations will see sharp declines. It doesn't seem so long ago that many of the largest U.S. banks, quite a while before television commentators were talking about derivatives, were in danger of failing from loan overexposure to the energy sector. Readers will understand how risk to cash flows can be mitigated through the judicious use of financial instruments, but also how risk can be amplified when those instruments are used improperly.

This book is designed to assist you in analyzing operating concerns. Large changes in market value resulting from balance-sheet assets deserve recognition but are not this book's focal point. For instance, when the price of gold runs up, EZCORP, Inc., a large pawn shop operator, often sees its stock rise owing to the company's high inventory of gold pawned merchandise; as gold falls, so too does the price of its stock.

During the real estate boom preceding the outset of the 2008–2009 recession, many stocks sensitive to the sector traded with little regard to cash flow or risk. Some shrewd managers of such entities recognized the discrepancy and placed their companies for sale to the greater fool, as did the board of directors at Central Parking Corp., which was being valued as an asset play.

Example:

Nashville, TN (Business Wire)—March 14, 2005. Central Parking Corporation (NYSE:CPC) announced today that its board of directors has retained Morgan Stanley as its exclusive financial advisor to assist the company in evaluating various strategic alternatives in order to maximize shareholder value.

"Our Board believes that the intrinsic value of our operating platform, as well as the value of our owned real estate, is substantially higher than is currently reflected in our stock price. With the goal of maximizing shareholder value, the Board has decided to evaluate strategic alternatives at this time," commented Monroe J. Carell, Jr., chairman and chief executive officer. "Since I founded Central Parking in 1968, the senior management team and I have spent considerable time developing the company into the industry leader that it is today, particularly in streamlining operations and reducing debt since my return in 2003. I now believe that it is time for the company to enter into the next phase of its corporate life in order to capitalize on the significant growth opportunities in today's recovering and improving economy."

This book will not neglect a proper discussion, analysis, and treatment of financial instruments because one would be foolish not to recognize the importance of the financial sector to the consumer (final demand) and to industrial companies, especially entities having financial subsidiaries. Indeed, industrial concerns do use hedging strategies, but in their case, such hedges are not supposed to drive the train. For financials, they do.

THE MACRO ENVIRONMENT

Although this book is principally about the analysis of free cash flow and risk to the equity holder, the latter measured by the cost of equity capital, it goes without saying that all companies are at the mercy of the macro environment. As we saw during 2010, the fiscal crises in Greece impacted the euro, and with it the financial markets in Europe and the United States. The macro environment affects cost of capital in a multitude of ways—from top-line (revenue) growth to bottom-line free cash flow. For these reasons, as will become clear from my credit model, I evaluate consistency of revenues and interest-rate spreads, among other such metrics that are inextricably tied to the vagaries of the economic and business cycle.

All companies are affected by macroeconomic events, such as embargoes, wars, taxes, threats, consumer confidence, legislation, and general economic prosperity,

and inflation. The latter, unless accompanied by substantial increase in free cash flow, often forces the real return on invested capital below the cost of capital, thereby depressing market values. Companies whose customers are regional in scope are more subject to local and state issues, in addition to the unavoidable macroeconomic factors.

For instance, the primary factors affecting demand for power (revenues) for local utility companies are weather and the economic conditions in the regions they serve. In 2004, Consolidated Edison, the large New York City utility, estimated that cooler than average summer weather reduced their earnings by \$5 million. While it is difficult to forecast the weather, long-term normal demand for electricity is easier to predict. Is the utility company located in a growth area? Is the state in which the company is located successful in attracting new business? Are taxes, environmental policy, and other regulatory matters conducive to growth of both consumers and business?

While the operating environment for a company under review may be satisfactory currently, it is imperative that analysts understand the climate for potential change—economic, political, and social.

Example:

Altria Corp, the parent company of Phillip Morris, owns a financial services division that leases aircraft [Phillip Morris Credit Corporation (PMCC)]. When the price of oil rose, many airlines, including United Airlines (UAL), had massive cash-flow drains, impairing their ability to service their lease obligations. This, of course, affected Altria.

PMCC leases 24 Boeing 757 aircraft to UAL with an aggregate finance asset balance of \$569 million on December 31, 2004. PMCC has entered into an agreement with UAL to amend 18 direct finance leases subject to UAL's successful emergence from bankruptcy and assumption of the leases. UAL remains current on lease payments due to PMCC on these 18 amended leases. PMCC continues to monitor the situation at UAL with respect to the six remaining aircraft financed under leveraged leases, in which PMCC has an aggregate finance asset balance of \$92 million. PMCC has no amended agreement relative to these leases because its interests are subordinate to those of public debt holders associated with the leveraged leases. Accordingly, since UAL has declared bankruptcy, PMCC has received no lease payments relative to these six aircraft and remains at risk of foreclosure on these aircraft by the senior lenders under the leveraged leases.

Source: Altria Corp, 2004 10K.

Example:

When Intel raised its first-quarter 2005 revenue and profit-margin guidance, stock investors greeted the news by pushing up its shares by 3 percent in after-hours trading. The next day, however, when both oil prices and the U.S. trade gap rose sharply, Intel shares dropped by 5 percent from its after-hours high. The macro effect overcame the firm's positive news.

Over the long term, the real driver of the train is management. It is management that strives to add value by virtue of its investments in assets whose returns are in excess of the firm's cost of capital. It is management that recruits, trains, and motivates. As such, we begin this book's journey, Chapter 2, with a discussion of management, showing how executives can create or destroy value. We show how the marketplace reacts to management changes in tacit recognition of expected shifts in free cash flow and risk. Also presented is an example of management leading a firm to bankruptcy by not calibrating the risks of leverage properly while both buying back shares and undergoing a large capital spending budget.

In addition, Chapter 2 discusses productivity and shows that equity values are indeed enhanced when free-cash-flow increases resulting from productivity enhancements. For non-free-cash-flow producers, enhancements to productivity have little value and generally are ignored.

MAKING EFFECTIVE USE OF FINANCIAL STATEMENTS

The role of financial statements is to provide users with relevant, reliable, comparable, and understandable information on which they can make rational economic decisions about a reporting entity. However, as we will see, the analyst can increase the predictive value of financial statements by incorporating adjustments to the balance sheet, income statement, and footnoted items into their analyses. These adjustments will provide the analyst with more reliable information on which to base his or her investment decisions. Too often, as we shall learn, the FASB, in its desire to present investors with greater transparency, has been forced to reverse or partially reverse earlier pronouncements that at the time they were originally put into effect were enacted with the intent of providing investors with greater insight and hoped-for comparability. Unless new accounting rules provide additional relevant information that the analyst could not gather easily on his or her own, they would rarely affect the cash-flow and credit analyst.

There is no doubting financial statement rule makers, both in the United States and around the world, can have a remarkable effect on stock prices and the cost of capital in the short run.

Chapter 3 begins our discussion on cash flows. I embark by providing a detailed understanding of the *Statement of Financial Accounting Standards No. 95*, *Statement of Cash Flows* (SFAS 95), including its intent and shortfalls and firms misapplications of the standard. Shown are various means by which cash flow from operations can be artificially bolstered or understated through misclassification, expense timing, lease classification, or change in funding pattern. Managerial ploys are also discussed in relevant later chapters.