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Preface

More than in any other industry, capital is an integral part of the business model of banks and insurance companies. For most industries, capital and (subordinated) debt are merely used to acquire the assets necessary to run a certain business model. In other words, the business model of most companies is not a function of its liabilities, but rather of its assets in combination with intangible assets that do not show up on the balance sheet (e.g. intellectual property, human capital, distribution network, partners). For banks and insurance companies, the non-capital part of the liability side of their balance sheets, which comprises deposits and insurance provisions respectively, are integral to their business model. These liabilities are used to acquire assets. Banks and insurance companies aim to earn a positive spread on what they pay on their liabilities and the income they receive on their assets. One of the most basic rules in finance is that one cannot earn additional yield without running risks. Therefore, a financial institution needs to have enough of a buffer to absorb losses should unexpected risks materialize. This is exactly the function of capital for a financial institution; i.e. to provide a cushion for unexpected losses related to the risks that are taken. The larger and more material the risks, the larger the required capital position. Hence, the capital position is a function of the risks and therefore an integral part of the business model of a financial institution.

Unlike non-financial companies, capital does not merely represent the claim that shareholders have on the company, capital at financial institutions is also crucial for being able to run the business. On top of that, the intense competition in the financial industry has forced banks, and to a lesser extent insurance companies, to search for optimal ways of financing. This has resulted in the fact that financial institutions

are more leveraged than other companies, which means that capital is more sensitive to risks and therefore needs to be actively managed. Even though capital is such an important element for any financial institution, there is very little literature on this subject. The book by C. Matten, *Managing Bank Capital*, stands out in the literature about the management of capital for banks.

This book aims to provide a holistic view on capital management for banks and insurance companies. A holistic approach has been chosen because it is imperative to understand all angles of capital management in order to fully comprehend the subject. Before one can start thinking about managing capital one first of all needs to be familiar with accounting and the balance sheet dynamics of financial institutions. Secondly, one has to know the boundaries within which one needs to operate. These boundaries are set by a combination of regulation, accounting, and internal risk metrics. Thirdly, one needs to understand how risk and capital management can be aligned. Lastly, it is important to understand the corporate finance aspects of capital management. Therefore, this book looks at four different perspectives on capital management for financial institutions, which are also the four parts of the book

- Part I: Accounting perspective
- Part II: Regulatory perspective
- Part III: Risk and capital management perspective
- Part IV: Corporate finance perspective.

When these four perspectives are mastered, the reader will be able to understand how capital management can fulfil its two primary objectives and create value as a result:

1. *Optimize capital structure* in order to achieve an *optimal cost of capital*;
2. *Optimize performance* so that, given a certain capital structure, a financial institution achieves an *optimal return on capital.*

For financial institutions, there is a lot more to capital management than simply optimizing the weighted average cost of capital. This is very often overlooked and misunderstood, and consequently senior managers, shareholders, and supervisors unfamiliar with the dynamics of capital management of financial institutions are often faced with unexpected and costly surprises.

The reason that this book focuses on capital management for both banks and insurance companies is because these institutions show

significant similarities and can learn from each other. In addition, banks and insurance companies are very interconnected and their business models and the products they sell continue to converge. Last, but not least, the investor base of banks and insurance companies is similar.

This book is written for capital management practitioners (e.g. capital managers, treasurers, risk managers), senior management at banks and insurance companies, shareholders, regulators, central bankers, economists, and business students. It offers the reader an overview of what capital management is really about. This is a difficult but necessary piece in order to solve the financial institution puzzle. The book is simply written and the theory is complemented with real-life examples where necessary. Even though regulation typically has little to do with actual business concepts, capital regulation has a clear business rationale. Therefore, Part II on regulation should by no means be viewed as boring, but is actually at the heart of gaining a full understanding of capital management.

Acknowledgements

This book is based on knowledge I acquired during my work in the financial industry. Therefore I would like to thank my colleagues throughout the years, especially my former colleagues at Barclays Capital (Thierry Lucas, Arturo Bignardi, and Faisal Khan) who jump-started my career in finance. Special thanks goes out to all the people involved in reviewing this work, especially Ries de Kogel, Charles Kieft, Bas Rooijmans, Maarten van Eden, and my father Jan de Weert. Finally, I would like to thank my partner Petra, who makes sure that my life is never boring and always puts a smile on my face.

Contents

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Capital Management as a Means to Create Value

The core message of this book is that capital management is a means to create value. In order to manage capital so that value is actually being created, one needs to have an understanding of many different topics. However, when these topics are discussed in isolation, it might not always be clear how each relates to capital management, let alone understand the role each plays in the value creating function of capital management. This chapter summarizes the main objectives of capital management and how the activities to realize these objectives fit into the broader management context of financial institutions. The chapter should also help the reader to place the topics that are discussed throughout this book in a broader capital management context. Because this chapter is conclusive in nature it might be that the reader is not familiar with all the terminology and concepts that are used. If this is the case, do not be deterred as the concepts and terminology are explained in subsequent chapters.

1.1 THE PRIMARY OBJECTIVES OF CAPITAL MANAGEMENT

Capital management has two primary objectives:

1. *Optimize capital structure.* This is an objective that capital management has to fulfil almost entirely by itself and evolves around the financing of business operations.[1] The activities that capital management undertakes to achieve this objective should ultimately result in an *optimal cost of capital.*
2. *Optimize performance.* The activities that need to be employed to fulfil this objective lie partly with the individual businesses and risk management. Even though, in order to optimize performance, capital

[1] Selling deposits or underwriting insurance policies are part of business operations and are not capital management considerations when optimizing the capital structure.

management is dependent on other areas within a financial institution, it should act as the owner of this optimization process. In this role, it should oversee and manage this process. Apart from developing a corporate strategy,[2] the activities to pursue this objective are similar to the activities of the strategy, risk, and capital management cycle as described in Chapter 19. If successful, these activities should lead to an *optimal return on capital.*

Figure 1.1 displays the main activities necessary to fulfil the two primary objectives of capital management. Both objectives need to be achieved in order to create maximum value. The next two sections explain each of the two primary objectives of capital management in more detail.

1.2 OPTIMIZATION OF CAPITAL STRUCTURE

Figure 1.1 shows the four main responsibilities of capital management in order to optimize the capital structure. When performed well, this should result in an optimal cost of capital. The four main responsibilities of this optimization process are discussed throughout the book, for which capital management is almost solely responsible. To summarize, these responsibilities are:

1. *Fulfil regulatory requirements.* This is a *conditio sine qua non* and means, among other things, that a financial institution's available capital should exceed required capital. Hence, capital management should always check whether its optimal capital structure fulfils regulatory requirements. If it does not, capital management needs to continue its optimization loops until regulatory requirements are fulfilled. Because there is some leeway in how to fulfil these regulatory requirements, it does not need to be imposed as a single condition in the optimization process. However, capital management does need to "tweak" its optimization until the requirements are fulfilled.

   Some people would argue that the regulator is a stakeholder that needs to be satisfied. This book treats *fulfilling of regulatory requirements* as a separate responsibility, because of their transparency and mandatory nature. Part II explains what capital management needs to do in order to *fulfil regulatory requirements.*

[2] The CEO is responsible for developing a corporate strategy.

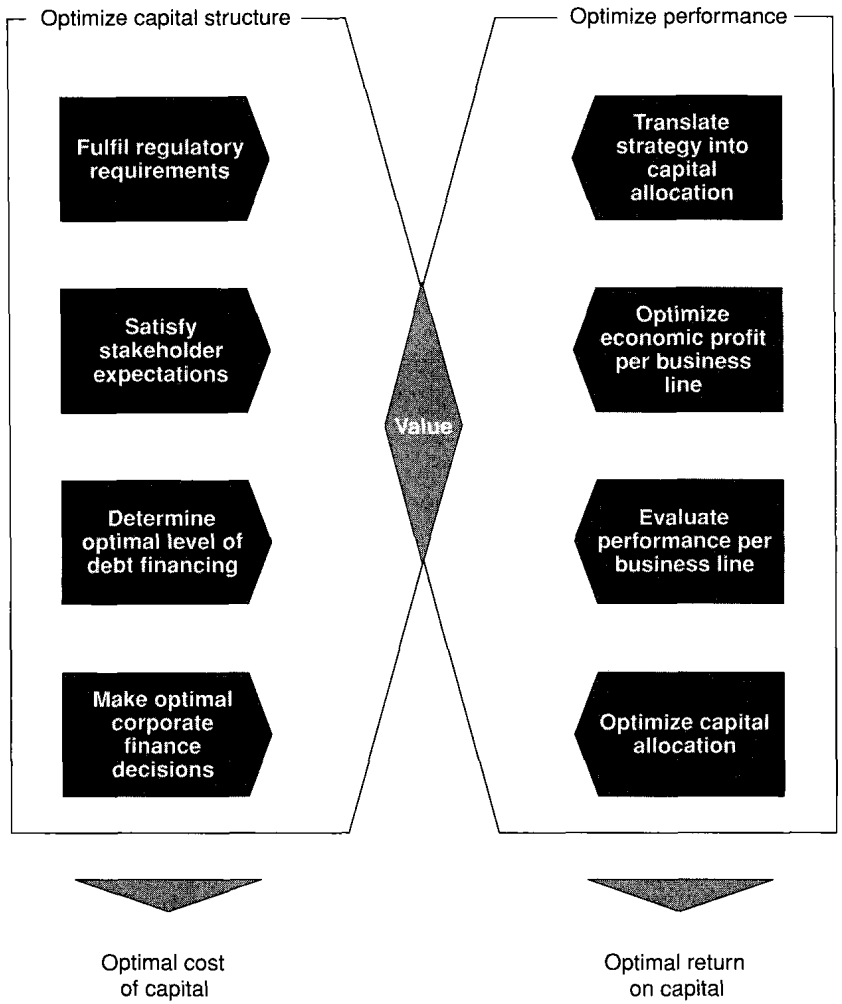

Figure 1.1 The two objectives of capital management.

2. *Satisfy stakeholder expectations.* In contrast to regulatory requirements, which are to a great extent transparent, it is hard to understand the exact expectations of different stakeholders. In general, a financial institution only gets signals if it is not satisfying certain stakeholder expectations. If this happens, it is already too late, because the financial institution needs to bear the negative consequences of the irrational behaviour of these unsatisfied stakeholders. It is crucial that a financial institution never finds itself in this situation.

Capital management is therefore responsible for conducting careful stakeholder analyses, and ensuring that the expectations of relevant stakeholders are met at all times. Or at least, if capital management chooses not to satisfy a certain stakeholder, it should be absolutely sure that the financial institution is able to withstand the potentially negative consequences. Satisfying stakeholder expectations is dubbed *the soft side of capital management* in section 17.3.

Capital management should go through optimization loops until the expectations of all relevant stakeholders are satisfied.

3. *Determine optimal level of debt financing.* This lies at the core of the cost of the capital optimization process. The main constraints for this optimization are stakeholder expectations and regulatory requirements. How to *determine the optimal level of debt financing* is discussed in section 20.3.
4. *Make optimal corporate finance decisions.* These are the more ad hoc type of decisions, such as acquisitions, but it is crucial to carefully think these decisions over as they can heavily impact the capital structure and therefore the cost of capital. How this is done in practice is explained in Chapter 20.

1.3 OPTIMIZATION OF PERFORMANCE

With respect to optimization of performance, capital management relies heavily on the individual businesses and risk management. Although optimization of (commercial) performance is primarily a responsibility of the individual businesses, capital management should drive this process in order to achieve an optimal return on capital on a consolidated basis. Nevertheless, the actual performance improvements need to be established by the businesses with the 'aid' of risk management. Capital management can influence this process by reallocating capital from businesses that perform relatively poorly to businesses that perform well. The main activities in order to achieve an optimal return on capital are discussed in Part III and can be summarized as:

1. *Translate strategy into capital allocation.* Once a corporate strategy has been formulated, available capital needs to be allocated in line with this strategy. However, this requires significant fine-tuning with the different businesses in terms of how and when this capital is actually allocated. Indeed, the allocated capital has to be in line with the size of the business. Even if the strategy is to expand a certain

business, this does not happen overnight. Hence, capital needs to be allocated over time, in line with the strategies of the individual businesses.

2. *Optimize economic profit per business line.* Once capital is allocated, the individual businesses and business risk management are responsible for getting the most out of this capital. In other words, the individual businesses need to continually improve their economic profit. Risk management challenges the individual businesses on the business they undertake and sets guidelines within which these businesses need to operate. Optimization of economic profit per business line is not a responsibility of capital management, but rather of the business and business risk management. This is discussed in Chapters 18 and 19.
3. *Evaluate performance per business line.* Performance evaluation is again a responsibility of capital management. As part of this activity, capital management evaluates how well businesses are performing and challenges them on how these individual businesses can improve their performance. Part of this performance evaluation is to compare RAROC (risk-adjusted return on capital) and economic profit growth potential. How this works exactly is discussed in Chapters 18 and 19.
4. *Optimize capital allocation.* Based on the performance evaluation, capital management should optimize its available capital allocation. This could mean that it has to reallocate capital from poorly performing businesses, or businesses with little growth expectations, to well-performing and high-growth businesses. This is also discussed in Chapters 18 and 19.