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Tools, Applications and Total Performance

Luc Nijs

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Set in 10/12 Times LT Std by Aptara, New Delhi, India Printed in Great Britain by CPI Group (UK) Ltd, Croydon, CR0 4YY To my parents.

For their relentless support in pretty much everything I do.

That they may continue to thrive in good health.

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For years now, for one and a half decades in fact, I have been engaged in the mezzanine world as an academic, trainer, consultant and as an entrepreneur/investor. Although nothing can replace practice and experience, it is the many students and practitioners I have met in my programs and courses, as well as the many business situations which triggered open-ended questions, that ultimately motivated me to write the book you now have in front of you.

During all those years the mezzanine finance world has changed a lot; it has grown significantly, boundaries have become blurred and financial innovations have made the spectrum more fragmented than before. Not surprisingly, many students and young professionals have wondered if they really understood what was going on, and when it was appropriate to use these products in a variety of situations thrown at them in their professional careers. They wondered which type of product to use and when, what the short and long-term impact would be for their firm, how to legally construct these products and, most importantly, how much risk there would be in each of these products, and therefore what a realistic and meaningful return would be given the risks involved. Some of them ended up in a vicious circle of self-repeating and self-reinforcing questions.

In my students' battle to embrace the dynamics of the product group and assess the adequateness of each product, their eagerness and uncertainty forced me to be clearer and more transparent in the way I communicated about the theme. That clarity is even more important in emerging markets where most of my business engagements are (and also my heart and passion) and where the banking sector has often not yet (fully) commercialized the product group. Sometimes this was because there was no need for the product group, sometimes because overall financial development has not been ongoing at a pace that would justify their introduction, and finally the contractual structure which can, at times, be difficult to understand, and/or difficult to produce, and the position the creditor ends up in when things go wrong, obstructed the introduction of the product group in some of those emerging markets.

This book is written around my experiences during sessions, and is based on years of implementing the product group in many countries, structures and industries while supporting different corporate or entrepreneurial objectives. The book, therefore, has content that can be described as a mix of academic analysis and practical applications for selecting and structuring deals. It is also characterized by a multidisciplinary approach, where economic, legal and financial aspects are intertwined where needed and as deemed appropriate.

I have also included the necessary examples and case studies, as the picture they provide can say more than a thousand words, and will further stimulate those who decide to use the book primarily as a study handbook or guide.

The book's content falls into four major divisions. After an introduction that allows us to look at the mezzanine market and the demarcation of the product group (Chapter 1), the second part of the book will include extensive coverage of the individual products, and contains a list of dos and don'ts for each of them (Chapter 2), the implicit cost of mezzanine products (Chapter 3) and the technicalities with respect to embedded optionalities (Chapter 4) as well as the overall pricing and valuation question. The third part of the book will look at the peculiarities of the product group when applied within certain industries and the implications of highly regulated environments. The banking sector, project finance applications, the real estate sector and private equity settings all pose specific questions and raise individual problems that we need to tackle (Chapters 5–8).

The fourth part of the book will look at the issues of structuring the products, accounting and legal issues, the struggle of rating agencies (Chapter 9) dealing with the product group, cash flow waterfall concerns and, most importantly, the question of an adequate risk–return trade-off for the product group, in particular in distressed situations or issues related to workouts or (outside) courtroom restructuring programs (Chapter 10). I end in Chapter 11 with an outlook for the product group and what innovation has delivered in this field in recent years. The aforementioned case studies and the necessary appendices which primarily contain legal and contractual support documents complete the book.

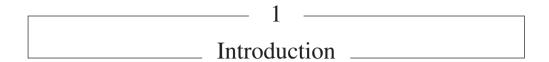
The book is therefore appropriate for both scholarly and professional purposes. For the academic or student wishing to delve deeper into the specifics of the product group, as well as the practitioner who might be looking for specific answers to the challenges that come with the application of the product group, this book provides the necessary answers and food for thought. The references made in the footnotes facilitate further reading.

The market is continuously in action and financial innovation will, at some point, force this work to be revised. Where possible, I have tried to use foresight to shape the content without leaning towards speculation about certain aspects of the product group's future and its place in the financing spectrum. Where adequate and properly identifiable, I also refer to regional differences in application or pricing levels of the product group. Finally I have tried to anticipate some of the most pressing questions facing the product group, both from a regulatory and a market point of view. No doubt, the future mezzanine market will be shaped in part by how the lending market and the need for credit will evolve into what will still qualify as significantly unstable markets, as well as the impact of Basel III and the wider regulatory reforms on the banking industry, and the further development of the shadow banking system and the regulation it will face. Each of these aspects will have distinct implications that can currently only be vaguely assessed.

Many times during the writing of this book I have had to use discretionary judgment about what to include and in how much detail. Statistically that must mean that, while exercising my discretionary judgment, I have been wrong on a number of occasions when making those decisions, for which I hope you will forgive me.

The mezzanine product group deserves increased attention and I hope this book contributes to that well-justified longevity. Happy reading!

Luc Nijs February 2013



For as long as some sort of trade-centered economy and society has existed for mankind, people have been financing those activities, either directly or through the sort of intermediaries that we now know as banks or financial institutions. Historically, there have always been two types of financing available for businesses which are trying to raise capital to fund their activities.

That sounds somewhat simplistic but 'debt' and 'equity' have always been the fundamental financing classes tapped into by businesses, despite the many investment vehicles most businesses have access to.

We begin this section by looking at the characteristics of debt and equity and then conclude by defining the scope of the mezzanine product group.

1.1 THE BI-POLAR WORLD OF FINANCE

There are many different ways in which businesses can raise money, the primary ones being 'debt' and 'equity.' As I mentioned above, that sounds somewhat basic, and I guess it is, looking at the many product choices firms have these days. However, the two groups point at a fundamental difference as we know it in corporate finance. Let's first look at the characteristics of both groups and then at the individual products that are included in these groups. After that, we will look more closely at the hybrid or mezzanine product group.

Although debt and equity are often characterized by referring to the products that feature their characteristics, i.e., stocks and bonds, the true nature of the difference lies much deeper; in the nature of the cash flow claims of each product.

The first big distinction has to do with the debt claim, which entitles the holder to a contractual set of cash flows to finance the repayment of the principal amount as well as the interests on a period-to-period basis. An equity claim, on the other hand, only holds a residual claim on the cash flows of the firm, i.e., after all expenses and other commitments are honored.

This is the fundamental difference, although the tax code and legal qualifications have contributed to the creation of further distinctive characteristics between both groups.

The second distinction, which can be seen as a direct consequence of the first distinction, is a logical result of the contractual claim that debt holders have versus the residual cash flow claim of equity holders. Debt claims have priority over equity claims, hence the qualification of equity owners as residual cash flow owners. That is true for both the principal amount and interest payments, and is valid until the instrument reaches maturity, even in the case of a bankruptcy or liquidation of the firm (claim by the debt holders on the firm's assets).

The tax laws in most countries make a distinction between the tax treatment of interest versus dividends. Interests paid are tax deductible when paid by the borrowing firm and are therefore cheaper on a net (after tax) basis. Dividends, however, are not tax deductible, as they are considered to be paid out of net cash flows.

Additionally, debt instruments have a fixed maturity, i.e., the principal amount becomes due at a certain point in time, together with the interests which have not yet been paid. (We will ignore, for the time being, perpetual bonds, which are, in essence, 99/100 year renewable instruments). Equity instruments are perpetual or infinite, i.e., they continue to exist until the firm decides to buy them back and retire them, or to liquidate the firm completely.

Lastly, because equity owners are the residual cash flow owners, they are given control over the assets of the firm and its operational direction. Debt investors usually have a more passive role, often with no power of veto over major decisions in the firm. However, in recent years debt owners have done a pretty good job of getting their foot in the door, by using positive and negative covenants in their loan agreements to have (some level of) control over major transactions that would impact their position in the firm, often by making their investment more risky (i.e., due to increased leverage) or by damaging their chances of being repaid.

In short, debt is characterized by a contractual claim on the firm, benefiting from tax-deductible interest payments, with a finite lifetime and a priority claim on cash flows in both going concern situations and bankruptcy or liquidations. Equity, on the other hand, has a residual cash flow claim on the firm, is an infinite security, where dividend payments do not come with tax deductibility, has no priority, but provides control over the management and assets of the firm (in theory). Securities that have characteristics of both are termed hybrid or mezzanine capital, a definition which we will refine later in this chapter.

Figure 1.1a brings the categories and characteristics together but requires some explanation. Starting from the debt and equity positions we have already discussed (which make up boxes 1 and 3), the figure substantiates those two financing classes by indicating which types of instruments can be classified as being either debt or equity and further introduces the hybrid capital category (box 2) with an indicative set of products included.

For the sake of completeness, and to provide a level playing field, I will review most of the products mentioned at this stage. Additionally, all terms are explained in the glossary, which can be found at the end of this book, and which includes a review of all technical terms used in this book, regardless of whether they have already been explained in the core text.

Box 1, which reflects the debt products, includes the following instruments:

- (1) Bank debt or loans which are fixed-income instruments with a fixed or floating interest rate and a pre-determined maturity. Often these loans are secured and therefore repayment is secured by collateral.
- (2) Leasing, which is a form of asset financing where banks or specialized leasing institutions provide the financing for a specific (im)movable asset. The asset also serves as collateral in case the lessee (the person who has requested the finance) is unable to meet the lease payments. Two main categories exist, i.e., financial (or capital) and operational leases. In an operational lease, the lessor (or owner) transfers only the right to use the property to the lessee. At the end of the lease period, the lessee returns the property to the lessor. In case of a financial lease, the lessee has an option to acquire the asset (often at the end of the lease contract). Technical criteria distinguish operational from financial leases, and there are numerous accounting implications that are beyond the scope of this book. The distinction is also under review by the IASB (accounting body governing IFRS/IAS statements) which has been in its final phase for some time now (at the time of publication). For our purposes the distinction matters less as both types involve the lessee making payments to the lessor, which include a repayment of the loan underlying the asset

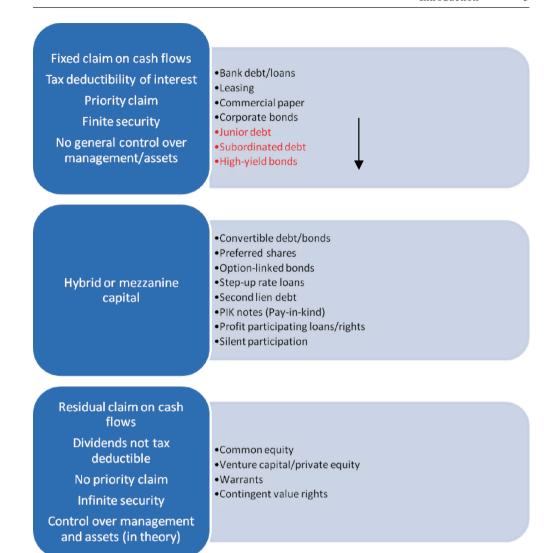


Figure 1.1a The financial spectrum

purchase by the lessor. The lease payments include much more, i.e., insurance, depreciation, maintenance costs etc.

(3) Commercial paper: when companies want to raise debt they traditionally have two options, they raise bank debt or issue a corporate bond (which can be listed or raised through a private placement). In both cases the firm will face significant costs, either because of the fees that come with bank debt or in terms of the capital raising fees it will have to pay to the investment bankers raising capital for the company. In case of bank debt those expenses can be as significant as 3–6% of the amounts looked for. In the case of a bond this can be anywhere between 3 and 7% depending on the investment bank one uses, the region where capital is raised and the amount sought. A cheaper alternative for organizations is to raise debt directly in the market through commercial paper. Commercial paper is

an unsecured instrument that allows companies to raise short-term debt (quite often the maturity will not exceed 270 days or nine months) often to finance current assets such as inventory, account receivables and other short-term liabilities. Because this type of instrument is unsecured, it can only be used by significantly creditworthy companies. In practice, the instrument is open to companies with an A credit rating or higher.

- (4) The next category in box 1 is junior debt, which can be qualified as those instruments that are 'junior' to other debt obligations a company has. That is, they are ranked lower on the repayment schedule than the more 'senior' debt instruments a company has committed to. They are also often unsecured.
- (5) Subordinated debt: Subordinated debt (which is mostly unsecured) is debt that is ranked lower than other debt instruments a company is committed to. In that sense they are also 'junior' as a debt instrument and aren't backed by a security. Subordination can happen in two ways: the first is contractually the loan contract will explicitly indicate that the interest and principal of this instrument will only be repaid after all other senior instruments have been repaid first. The subordination can also happen structurally when the conditions and maturity of the loan have been structured in such a way that all other loans will be repaid before the structurally subordinated loan will be repaid. That can happen because the maturity of the loan is further in the future than all other loans and/or the interest is rolled up towards the instrument's maturity. In the meantime, all other senior lenders will be repaid.
- (6) High-yield bonds (aka junk bonds) are debt instruments with a poor credit rating (in practice a non-investment grade rating which comes down to BB+ (S&P and Fitch), Ba1 (Moody) or lower categories.

In box 3, which is the equity box, one can find common equity, the mother of all equity instruments. Equity provided by private equity firms and venture capital firms fits into this category as well. Warrants, once converted, entitle the holder to a certain pre-determined stake, in most cases, in the equity of the firm which issued the warrants. A warrant can therefore be qualified as an instrument that entitles the holder to purchase or receive common equity in the warrant's issuing company. Contingent value rights are like an option where the holder of the rights is entitled to buy additional shares in the issuing company when certain events happen, under pre-determined conditions and pricing. This often happens after an acquisition or restructuring, where shareholders of the target company can acquire additional shares in the acquiring company (if, for example, the value of the shares of the acquirer drops below a certain point before a certain date).

Finally, in category two, the instruments that have characteristics of both debt and equity either simultaneously or subsequently are listed. In Chapter 2 we will discuss extensively each of these instruments and compare their technical characteristics. For now it is sufficient to understand that each of the products included in box 2 will have, with varying degrees of intensity, characteristics of debt and equity and consequently their risk profile will be very different. Some will be hardly any different from a normal debt instrument as included in box 1 and others will show extreme similarities with the equity product group in box 3. What is striking, though, is that almost all are packaged in what qualifies legally as a debt instrument (with the exception of preferred stock), despite their significantly higher risk profile, a risk profile that sometimes hardly differs from an equity instrument.

In the wider context of financing options, mezzanine qualifies as an external source of funding as categorized in Figure 1.1b.

Forms of financing				
Internal financing		External financing		
Funds from business activities:	Funds from the release of capital:	Equity:	Debt:	
•Retained profits •D&A •Reversal of provisions	•Sales of assets (divestitures)	Capital contribution from existing equity holders Capital contribution from new equity holders Private equity Public equity (IPO, Secondary offering)	Banks (loans) Capital goods leases Suppliers (credits) Customer (advances) Bonds	
		Mezzanine financing		

Figure 1.1b Financing options for companies *Source:* Credit Suisse economic research

1.2 DEMARCATION OF THE PRODUCT GROUP

Now that we have the categories in place, we are left with the grueling task of finding the demarcation line as precisely as possible and defining it as accurately as possible.

We could do that by looking at the reality of how the instruments are used, positioned or otherwise, but that would prove to be a mixed bag as well, and further, would not really help us develop a clearer picture of the product group.

Looking at the legal qualification would force us to drag many hybrid instruments back into either the debt or the equity category, mostly the former, hence the need for a separate category of hybrid capital.

The above issues have left those wishing to define the product group in the difficult position of having to describe the product group by its characteristics. Though I don't want to go out on a limb here, I will take on the challenge of breaking down the individual characteristics, to see where the rough edges are or question marks could be placed.

By looking at the mezzanine product group as a whole, the following characteristics can be identified:

- The individual products are all unsecured products, i.e., there is no collateral and/or firm lien on some or all assets of the borrowing firm. Second lien loans are an exception to this criterion, but aren't strictly part of the mezzanine group.
- All the products carry a compensation scheme which includes the provision that (at least part of) the compensation is dependent on the future profitability of the firm (or, by extension, the return on equity or economic value creation of the firm). This one raises some additional

questions. Products like junior debt, subordinated debt or unsecured debt all tend to be unsecured in their positions, but otherwise do enjoy the equity kicker that many other mezzanine products do. So some discretionary judgment is needed. On the one hand, these products are legally debt just like most other mezzanine products. On the other hand, they are also unsecured just like all the other mezzanine products. Where they deviate is that they do not directly enjoy the equity uptick that other products have built into their mechanics. It could be argued, however, that the higher spread that is built into the compensation scheme intrinsically includes that equity component. The counterargument is that an increased spread cannot reflect equity performance, it can only reflect higher risk patterns absorbed by the instruments, and in no way can it reflect the potential up- or downside that equity exposure can bring. So you could either argue that they belong to the debt product group (if you overweight the legal debt qualification) or that they are positioned in the outer space of the mezzanine cosmos (if you overweight the unsecured position and the higher overall risk profile they have relative to their peers in the debt group). One could say that there is a difference when defining mezzanine products *sensu lato* and *sensu stricto*.

- Some products are finite and others are infinite in nature. Besides the perpetual loans and non-redeemable preferred shares, all products are finite in nature.
- Most of the products (except for preferred equity) are debt instruments (in their legal qualification), which raises the question about the semantics of the term mezzanine capital versus the term mezzanine debt. Nevertheless, most of the products have a risk profile much closer to equity than their legal qualification initially suggests.

So, you can see for yourself that the jury is still out on some of these products in terms of their qualification, or at least that there is a mixed bag of characteristics within the mezzanine product group. An alternative way of looking at the product group is through its risk profile, which we will do in Section 1.4.

The historical distinction between debt and equity doesn't make our life a lot easier. In fact, you might wonder if there is a justification for treating debt and equity in such different ways. In particular, the different tax treatment has raised many questions among scholars, none providing a compelling argument for why the difference emerged, nor for why we should keep the distinction intact, especially since the differences trigger specific behaviors among market participants. Given the (lower) net cost of debt there is an inclination among market agents to use (too) much debt to fund their activities. That in itself is not evil, but raises the fixed cost levels in the firm (as they are fixed commitments). In days of poor economic performance or market volatility, or just lower levels of liquidity in the banking sector, that situation can trigger issues for firms operating high levels of debt, as the 2008 financial crisis demonstrated.

Furthermore, as a country you can wonder if it is so attractive to have a lot of thinly capitalized firms in your economy, as they pose an intrinsic risk to other market participants through enhanced counterparty risk when dealing with them. Many countries have therefore introduced 'thin capitalization rules' in their tax code, which essentially are there to cap the amount of deductible interests a firm can deduct for tax purposes in any given period. The technical way that is determined differs slightly for each country, but the rules either put a nominal cap on the amounts of interests that can be deducted and/or put in place maximum debt/equity relations for any given period. For example, if your debt to equity ratio is higher than 3:1, the interest due on any debt amount above the 3:1 ratio is no longer deductible for tax purposes, making the instrument more expensive on a net basis.

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However, only one country in the world went as far as abolishing the distinction between debt and equity for tax purposes. That country is Belgium. In 2007 (yes, before the financial crisis) the Belgian government introduced what is known as the 'notional interest deduction.' The mechanism allows for the tax deductibility of an artificial dividend from the equity side of the financing mix. They don't look at the effective dividends (which are not tax deductible) but at an artificially constructed dividend based on the T-bond rates in that period increased by a certain spread. The level of the spread is then based on certain conditions. This way an equity investment holds the same benefits as a debt investment.

Besides the significant impact the introduction of this rule had on the budget, the government intended to ensure a better capitalized economic environment in the country. That is pretty understandable as the country enjoys major inbound investments every year, and is often the prime location for overseas investors to locate their European holding (and consequently Belgian holdings capitalize many subsidiaries in other European countries). Consequently, the capitalization of that holding determines the economic strength of its subsidiaries in Europe, especially when the economic tide shifts. Since 2007, the rule has been adapted a few times to remove possible abuse situations and non-intended usages within international tax planning schemes.

Going even beyond that, questions can be raised about the true nature of an equity or debt instrument. All too often we look at the legal characteristics of the product to judge its nature. In most cases that is fine, but there are some exceptions that might make you wonder. If one provides a loan (in legal terms) to a firm which is in such a desperate economic state that it almost certainly will not be able to pay back the loan and interests due, one can wonder if the legal qualification is still adequate.

The jurisprudence in many countries has responded to these situations by denying the deduction of the interest, re-qualifying the loan to equity and/or re-qualifying the interest to a 'deemed dividend.' In order to do that, the legal system needs to allow the tax authorities to ignore the legal reality of a business transaction in favor of the economic reality underlying the business transaction. Whether a legal system allows the economic theory doctrine to be applied is often a matter of legal principle in that jurisdiction and the answer often needs to be derived from other parts of the law beyond the tax code. In countries which do not have an economic theory in place, the tax authorities will have to turn to the 'abuse of law' provisions in their tax codes and argue that the participants in the deal were intending a different outcome to the one the legal qualification would normally imply. That is an uphill battle for tax authorities and disputes are therefore mostly settled out of court.

I think it is fair to temporarily conclude that the debt to equity spectrum is a diamond with many angles, which are colored differently depending on your perspective.

1.3 POSITIONING AND USE OF MEZZANINE FINANCE

Maybe we will get some further answers when looking at the reason why mezzanine finance exists to begin with and for what purposes it is used. When looking at the transactions for which mezzanine finance is used there is a long list of transactions that keep coming up.

¹ In The Netherlands this line of thinking originated from the 'bodemloze put' theory based on a number of historical court cases. It refers to the idea that if you throw money into a bottomless pit you will never see your money again despite the legal claim you might have according to the instrument.

On that list are:

- Funding M&A activity (industry related or not) or funding organic growth and spin-offs.
- Restructuring or reorganization of the business.
- Funding the acquisition of portfolio companies by private equity firms (LBOs or otherwise).
- Management buy-ins/outs.
- Internationalization.
- Succession planning.
- Project finance.
- Change of strategic direction.
- Providing 'bridge' financing to portfolio companies on their way towards an IPO (when owned by a private equity firm).
- Recapitalizations.
- Funding the introduction of new products or service groups, plant expansion or the development of new distribution channels.
- Overall refinancing of activities or financing overall growth ambitions.

It is fair to say that mezzanine financing often comes on the radar for management or business owners if there is no sufficient collateral that would justify bringing in additional senior secured debt, or where the visibility of future cash flows is blurred or prone to many externalities. Added to that list are limited profitability or a deviant corporate risk profile.

It is also fair to say that, given its deviant evolution, mezzanine is looked at differently in the US versus Europe. The US, with its more mature and developed capital markets, has developed a mezzanine group that is seen as a variation on publicly traded bonds (convertibles etc.) and therefore can be called public mezzanine. On the other hand, in Europe, where bank lending has played a more critical role in corporate funding, a private mezzanine market has been developing which tends to be closer to debt financing (subordinated and participating loans etc.). Other critical differences are discussed throughout the book.

First, however, let's consider the life stages of a company and the primary ways of financing in each of the individual stages (Table 1.1).

Firms always have to decide whether they will finance their operations going forward using internal or external sources. Internal financing is often preferred, given the cost of, or access to, external funding, but it is not always realistic given the cash flow generation of the firm or the level of funding needed.

It is fair to say that reality is not as clinical and sharply distinct as reflected in the chart below. Transitions are smoother or less defined and firms may have many ways to reinvent themselves in order to fight off the decline of their product group(s). That can range from introducing new product groups and/or services, to making acquisitions into (un)related industries and offloading certain asset groups that have a higher stand-alone value or are no longer core to the business strategy.

The availability and cost of debt and equity also have an impact on how funding activities will arise. The recent financial crisis of 2008 and the emerging equity gap² could push

²McKinsey Global Institute, 'The emerging equity gap,' October 2011.

External funding needs	High, unconstrained	High v-a-v firm value	Moderate v-a-v firm value	Declining v-a-v firm value	Low as opportunities are rare
Internal financing	Low or negative	Low or negative	Low relative to financing needs	High relative to financing needs	Higher than funding needs
External financing	Owner's equity Bank debt	VC/ Common stock	Common stock, Warrants, Convertibles	Debt	Retire debt, stock buy backs
Growth stage	Start-up Venture Capital/ Private Equity	Expansion Initial Public Offering	High growth Ad. Equity	Mature growth Bonds/C. Bonds	Decline or re-up

Table 1.1 Financing the individual life stages of a company

the cost of financing up, although some of that will be offset by historically low interest rates applied to the market both in the US and in Europe; interest rates have been hovering around 0–1% for a number of years now and are expected to stay there for at least a few more years, although in early 2013 central banks were starting to prepare the market for the fact that quantitative easing will end at some point. This might happen more unexpectedly than the average market participant would envisage. Pricing in the secondary government bond market already seems to hint that increased interest rates are expected. In emerging markets interest rates are higher, mainly as they are fighting (somewhat) higher levels of inflation, whereas throughout 2011–2012 the main theme was fighting deflation in the US and Europe.

One thing is clear: in cases where senior debt is not an option (or is not sufficient to cover the whole funding need), mezzanine is a plug variable (it plugs the gap between debt and equity). It allows a firm's debt financing to grow, without the owner losing control over company assets. That, however, carries an intrinsic risk, whereby the owner tries to avoid a (further) dilution of their equity stake at any cost, but burdens their company with so many priority debt claims that he or she literally erodes the residual cash flow generating ability of the underlying assets for the equity owners. It is often emotional reasons which make smaller companies turn to mezzanine financing as a less costly (relative to bringing outside equity into the firm) but (partly) fixed cost option, often with no – or only temporary – dilution of their equity stake.

The consequence is that, from a risk perspective, mezzanine products all sit between the layers of senior debt and pure equity. They should therefore, in a risk-return world, trigger higher compensation than senior debt and a lower return than common equity. These often difficult questions about pricing deserve a full chapter later on in the book (Chapter 4).

When mezzanine debt is used in conjunction with senior debt it reduces the amount of equity needed in the business. As equity is the most expensive form of capital and dilutive to existing shareholders, it is common sense for owners or majority stakeholders to aim to create a situation that comes at the lowest cost possible and is least dilutive when the business comes to be expanded.

The following example in Table 1.2 illustrates the latter point:³

Table 1.2	Reducing th	e cost of	capital
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Financing structure before mezzanine		1	After mezzanine	
	US\$	Cost of capital (%)- Assumptions	US\$	Cost of capital (%)
(Senior) bank loan	3	5	6	5
Mezzanine loan	0	0	2	12
Debt Capital	3	5	8	6.8
Equity Capital	3	20	3	20
Total Capital	6	12.5	11	10.4

The advantages and disadvantages of mezzanine finance can be summarized as shown in Table 1.3:4

Table 1.3 Advantages and disadvantages of using mezzanine finance

Advantages	Disadvantages
 Remedies financial shortfalls and provides capital backing for implementing corporate projects; Improves balance sheet structure and thus creditworthiness, which can have a positive effect on the company's rating and can widen the room for maneuver as regards financing; Strengthens economic equity capital without the need to dilute equity holdings or surrender ownership rights; Tax-deductible interest payments and flexible remuneration structure; Greater entrepreneurial freedom for the company and limited consultation right for mezzanine investor. 	 More expensive than conventional loan financing; Capital provided for a limited term only, in contrast to pure equity capital; More stringent transparency requirements.

1.4 THE RISK-RETURN CONUNDRUM

From a balance sheet point of view, mezzanine finance is positioned between senior secured debt and common equity. It is therefore subordinated to senior debt claims but junior to common equity claims, although the latter isn't a claim in the full sense, but only an entitlement to the residual cash flows produced by the firm. Figure 1.2 is a visual representation of the risk–return continuum of the mezzanine space. It is best to ignore the vast variety of instruments listed, but to realize for now that the mezzanine continuum spans the risk–return matrix between senior secured debt and common equity, the two instruments listed at either end of

³ 'Mezzanine finance – A hybrid instrument with a future,' Credit Suisse, Economic briefing, 2006, p.10.

⁴ Ibid. p. 9.

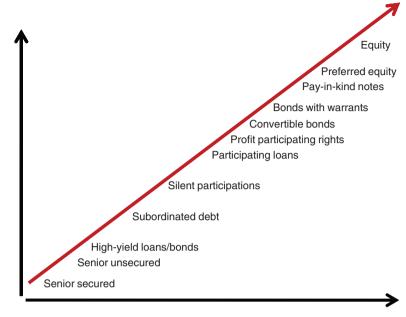


Figure 1.2 The risk–return paradigm *Source:* Adjusted from CS economic research

the risk-return matrix indicated. Also note that the pecking order indicated in Figure 1.2 is essentially a default order. This means that the risk-return order could be altered through the use of covenants in each of the products which would make the product under review less or more risky and consequently change its position in the matrix. As represented here, it reflects the typical risk-return ranking of a plain vanilla product group.

In recent years, mezzanine products have seen increased attention due to the altogether limited availability of credit, the lower valuations attached to certain assets on the balance sheet, or the unwillingness of banks to fund certain current assets with senior debt due to structural weakness in terms of liquidity terms under (dis)stressed situations.

To be more specific:

- Accounts receivable, inventories and even certain fixed assets such as real estate are given a much lower valuation, or not accepted as collateral any longer;
- Lending against goodwill and/or other intangibles is even harder; and
- Banks and other FIs have tighter caps on how much exposure they can tolerate within a specific firm, sector or country (see Figure 1.3a/b).

The question then becomes: 'How much debt is too much before mezzanine emerges as a potential financing tool?' We could opt for a simple pragmatic answer here, but first let's define the parameters of the answer we are looking for. Financial institutions will generally see an end to how far they can travel with a firm in terms of lending. This can be based on bank-specific criteria such as total loan mass (per client or region), total loan mass in a specific industry or maximum loan mass to a specific firm. Most of the time this is a problem only in emerging economies with firms showing high growth prospects and which rely heavily

When does mezzanine come on the radar?

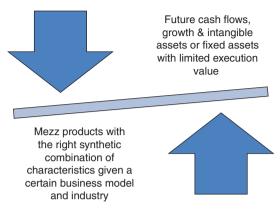


Figure 1.3a When does mezzanine finance come on the radar?

Company balance sheet	Equity & Liabilities	Financing instruments	
Assets	Liabilities	•Bank loans	
	Liabilities	Supplier credits Customer advances	
	Mezzanine	•Subordinated loans	
Fixed assets	Mezzanine	Silent participations Participating loans/rights Preferred shares Convertible bonds with warrants	
	Equity	•Retained profits	
	Equity	Stock Capital contributions from equity holders Private equity	

Figure 1.3b Mezzanine capital versus debt and equity

on senior bank debt to execute their business model. However, with Basel III on the horizon (most of it to be implemented by 2019 as it stands in early 2013), and with higher capital ratios included in the rules, banks will have a narrowed platform to provide lending to corporates and the real economy in general. They will most likely channel their funding to government bonds, as they do not require risk capital, in contrast to normal corporate or personal lending loan banks.

On most occasions, however, the problems that arise are firm-specific. Banks and non-bank financial institutions ('NBFIs') are willing to lend to firms and organizations under the condition that they have some sort of guarantee backing their lending arrangement in a structural way, in case of default on the loan. That is easily understood, as it is not much different

than you or I buying a house and getting a loan from the bank for which the bank will require a first lien mortgage on the property being financed. However, they are willing to lend in line with the market value of the property, potentially even adding funds to pay for renovations such as a new kitchen or bathroom. The pain is in the word 'potentially,' as most banks in most countries will cap the amount of extra funding they are willing to provide for the simple reason that if you default they will encounter a funding exposure; i.e., they lent you more that the market value of the property, most likely even with the renovations. This is very likely to be true when the costs and transfer duties have been included in the loan amount as well.

Until a few years ago, banks had the benefit of assuming that the value of a house will go up over time. Now that the world has painfully illustrated that this is not necessarily always the case, with varying degrees of intensity across the world I must add, banks have become very conservative in estimating the execution value of the property (i.e., the market value under stress, if you like).

So the market value of assets has become more volatile and insecure in recent years, and from their side banks have become more restrictive in lending terms, unless there are assets with an execution value close to their actual lending exposure providing backing.

Although these numbers, percentages and estimations vary somewhat over time and geography, Figure 1.4 attempts to provide some insight into the parameters that banks use when judging the execution value of an asset.

The figure shows that, just as your bank now requires you to have some money to put down as a deposit when you buy a property (often 20%), the situation is quite similar when you finance assets for a firm. They will consider your actual free cash flow to estimate your ability to repay, and are, to a certain extent, willing to see how your future cash flows will improve and include that information in their calculations. However, even that will reach its limit at some

Assets	AB lending
Cash & securities	100%
Receivables	70–85% based on quality (backward looking default rates)
Inventory	45–65% of normal liquidation value (NOLV)
Equipment & real estate	Lower % NOLV (around 70% of NOLV for equipment and approximately 80% for real estate)
Intangibles: patents, etc	Low % of DCF valuation (royalty stream focused)

Figure 1.4 Collateral value of assets

point. At that point your banker will tell you that there is very little they can do, unless there is more collateral they can turn to, either within the firm or based on the private wealth of the owner(s). From a market perspective (and driven by regulation) it is clear that banks will only focus on asset-based financing and firms will be in increased need of cash flow-based financing. Intuitively that makes sense, i.e., when you lend capital to a firm they will turn that capital into assets, which will be converted into cash flows at some point, which then will be partly used to repay the interest on and principal of the loan. Nevertheless, finance is not necessarily as rational as you would expect, especially not in cases where you have a regulator breathing down your neck and increasingly regulating how your balance sheet should look, which is the case for most licensed banks these days.

From a balance sheet perspective, Figure 1.5 reflects how that conundrum looks. It should be added here that for specific transactions, like M&A, most banks require an equitable intervention of about 25–30% on behalf of the acquiring firm.

Collateralized assets	Asset-backed financing
	Cash-flow finance
Value of existing and/or future CFs	Equity

Figure 1.5 How much debt is too much debt?

Given the banks' position, mezzanine has developed distinct characteristics and is guided by specific features that differentiate the product group from other financial instruments on the balance sheet spectrum. In Table 1.4, I have tried to bring together some of the most important features compared to other financial products. That being said, throughout this book I will pay significant attention to the possible risk profiles, and formulate a structured way of assessing that risk for each of the different positions in which mezzanine finance can be considered. With respect to the criteria included, in particular regarding the pricing components, it needs to be highlighted that those are obviously sensitive to geographically different demand/supply relations and the overall state of the financial markets and interest rates. This helps to explain why some of the bandwidths indicated could appear relatively wide at first glance.

In general terms, it can be stated that the fixed interest component in mezzanine products tends to be larger in the US than in Europe, whereas my market observation is that the equity kicker tends to be larger in Europe than in the US, although total compensation patterns are quite alike across both continents, which has been true across the normal macro-economic cycles. In periods of distress, spikes can be observed in yields. One of the most extreme examples of this phenomenon was in the early days of the 2008 financial crisis when liquidity dried up and available equity was almost non-existent: some mezzanine funds in the CEE region, a region heavily impacted in the early days of the crisis, were able to put their product in the market at yields in the first decile only, and often far above the actual equity return at that point in time. These are usually temporary phenomena. Similar situations have been observed in the past in emerging markets, often also centered around periods of economic distress and/or financial imbalance. It must be said that it is only during the last 10 years