Petri Mäntysaari

The Law of Corporate Finance: General Principles and EU Law

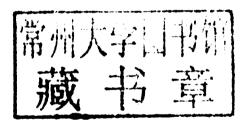
Volume II: Contracts in General



Petri Mäntysaari

The Law of Corporate Finance: General Principles and EU Law

Volume II: Contracts in General





Professor Petri Mäntysaari Hanken School of Economics Handelsesplanaden 2 65100 Vaasa Finland petri.mantysaari@hanken.fi

This title is part of a three volume set with ISBN 978-3-642-03105-2

ISBN 978-3-642-03054-3 e-ISBN 978-3-642-03055-0 DOI 10.1007/978-3-642-03055-0 Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2009938577

© Springer-Verlag Berlin Heidelberg 2010

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilm or in any other way, and storage in data banks. Duplication of this publication or parts thereof is permitted only under the provisions of the German Copyright Law of September 9, 1965, in its current version, and permission for use must always be obtained from Springer. Violations are liable to prosecution under the German Copyright Law.

The use of general descriptive names, registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Cover design: WMXDesign GmbH, Heidelberg

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

The Law of Corporate Finance: General Principles and EU Law

Table of Contents

I	Intr		on		
	1.1				
	1.2	Particular Contract Types1			
	1.3	1.3 Examples of Topics			
		1.3.1	The "Perfect Contract"		
		1.3.2	Payment Obligations	4	
		1.3.3	Nexus of Contracts	5	
2	Con	tracts	in General: The Legal Framework	7	
	2.1		luction		
	2.2 The Legal Framework: General Remarks		9		
		2.2.1	Introduction		
		2.2.2	Platforms, Market Practice, Contract Models		
		2.2.3	Governing Law		
		2.2.4	Choice of Legal Background Rules		
	2.3	The L	egal Framework: EU Contract Law		
		2.3.1			
		2.3.2	The Law Governing the Contract		
		2.3.3	Approximation of Contract Laws		
	2.4	4 Fixing the Legal Framework			
		2.4.1	Introduction		
		2.4.2	Documentation	27	
		2.4.3	Choice of Governing Law	29	
		2.4.3	Limiting the Scope of Substantive Provisions of Law		
	2.5	Choic	ee of Core Commercial Terms		
		2.5.1	Introduction	34	
		2.5.2	Definition of Performance	36	
		2.5.3	Price and Payment Obligations		
		2.5.4	Performance, Price, Cost, Risk		
		2.5.5	Economic Efficiency and the Choice of Terms		
		2.5.6	Management of Agency, Loyalty, Non-competition		
		2.5.7	Business Outsourcing		
3	Mai	nagem	ent of Legal Risk: General Remarks	47	
_	3.1		Risks		
	3.2		Managed by Legal Means		

4	Risk	ks that	Relate to the Country's Legal System	49
	4.1	Introd	luction	49
	4.2	Laws	Not Enforced (Lack of the Rule of Law)	49
	4.3	Chang	ge of Law	54
	4.4			
		4.4.1	General Remarks	56
		4.4.2	Community Law	
		4.4.3	Differences Between Member States	
		4.4.4	Mitigation of the Flexibility of Law Risk	
	4.5		atory Provisions	
_	D'.I		Delega de de Cartemando ef de Dendios	75
5	5.1	Introd	Relate to the Statements of the Parties	
	5.2		pretation of Contracts	
	3.2	5.2.1	Introduction	
		5.2.1		
		5.2.2	Interpretation of What People Say or Do	
			Traditional Canons of Interpretation	
		5.2.4	Real Method of Interpretation	
		5.2.5	Mitigation of Risk	
	5.3		s Not Binding	
		5.3.1	Introduction	
		5.3.2	Non-conformity with Mandatory Rules	
		5.3.3	Different Types of Mandatory Rules: Introduction	
		5.3.4	Fraud	
		5.3.5	Unfair Contract Terms Under Community Law	
		5.3.6	Unfair Contract Terms Under Member States' Laws	
		5.3.7	Mitigation of Risk Caused by Mandatory Rules	
		5.3.8	Particular Remarks on Standard Form Contracts	
		5.3.9	Mitigation of Risk in Other Areas of Law	149
	5.4	Bindi	ng Terms Not Enforceable	155
		5.4.1	Introduction	155
		5.4.2	Recognition and Enforcement of Judgments	155
		5.4.3	Availability of Specific Performance	
	5.5	Bindi	ng Terms Too Rigid	
		5.5.1	Introduction	
		5.5.2	Community Law	
		5.5.3	Member States' Laws	
		5.5.4		
			Particular Remarks on Material Adverse Change	
	5.6		act Terms Become Binding	
	5.0	5.6.1	Introduction	
		5.6.2	Mitigation of Risk	
		5.0.2	Mingarion of Mak	100
6	Mai		ent of Counterparty Risk	
	6.1		luction	
	6.2	Coun	terparty Corporate Risk	188

		6.2.1 Introduction1	88
6.2.2 Community Law an		6.2.2 Community Law and Member States' Laws	88
		6.2.3 Mitigation of Counterparty Corporate Risk2	
	6.3	Counterparty Commercial Risk2	
	0.5	6.3.1 Introduction	
		6.3.2 Community Law and Member States' Laws	
		6.3.3 Management of Counterparty Commercial Risk2	13
7	Man	agement of Information2	39
,	7.1	Introduction	
	7.1	Information Duties 2	
	7.3	Substance	
	1.3		
		7.3.1 Core Obligations	
		7.3.2 Provisions that Influence Core Obligations	
		7.3.3 Secondary Duties	
	7.4	Separate Information Duties	49
0	D	want Obligations, Introduction	<i>5</i> 1
8		ment Obligations: Introduction	
	8.1	Traditional Payment Obligations	
	8.2	Other Forms of Payment Obligations	.52
9	Pavi	nent Obligations: Traditional Legal Questions2	53
	9.1	Introduction	
	9.2	Money, Currency, Governing Law	
	9.3	Principle of Nominalism	
	9.3	Money as Money or a Commodity	
	9.4	Interest	
	9.3		
		9.5.1 Introduction	
		9.5.2 Fixed Rates, Floating Rates, the Eurosystem	
	0 (9.5.3 Contract v Mandatory Law	
	9.6	The Performance of Monetary Obligations	
		9.6.1 Introduction	
		9.6.2 Payment	
		9.6.3 Finality, Conditionality, Revocability, Recourse	
		9.6.4 Set-off	
		9.6.5 Netting	275
10	•	i E CB (OLL) d	.01
10		eric Forms of Payment Obligations	
		Legally Not Enforceable Cash Flows	
	10.3	Legally Enforceable Payment Obligations	82
11	Man	agement of Counterparty Credit Risk2	27
		Introduction2	
		Choice of the Form of Payment Obligations 2	
	11.3	Choice of the Time of Payment	.92

	11.4	Transferability	298
		11.4.1 Introduction	298
		11.4.2 Basic Legal Aspects Relating to Transferability	299
	11.5	Enforceability of the Transfer	
		11.5.1 Introduction	303
		11.5.2 Assignment of Receivables	
		11.5.3 Transfer of Negotiable Instruments	
	11.6	The Use of Credit Enhancements	
		11.6.1 Introduction	
		11.6.2 Management of Counterparty Commercial Risk	
		11.6.3 Securing Obligations by the Value of Assets	
		11.6.4 Payment Obligations of a Third Party	359
	11.7	Hedging	
		11.7.1 Introduction	
		11.7.2 Hedges Linked to the First Transaction	
		11.7.3 Netting, Close-out Netting, Set-off	
		11.7.4 Derivatives	
	11.8	Credit Risk Transfer in General	393
		11.8.1 Introduction	
		11.8.2 Incentive Issues: Risk Shedder's Perspective	
		11.8.3 Incentive Issues: Risk Taker's Perspective	
		11.8.4 Tranching	
12		er Contract Types	
		Introduction	
		Multi-Party Contracts	
	12.3	Islamic Finance	
		12.3.1 General Remarks	
		12.3.2 Basic Principles	410
Re	feren	ices	415

1 Introduction

1.1 Investments, Generic Contracts, Payments

According to Volume I, contracts are one of the five *generic legal tools* used to manage cash flow, risk, agency relationships, and information. Many *investments* are therefore based on one or more contracts.

Obviously, the firm should draft good contracts. Good drafting can ensure the same intended cash flow with reduced risk. Bad drafting can increase risk.

This volume attempts to deconstruct contracts used by non-financial firms and analyse them from a cash flow, risk, agency, and information perspective. The starting point is a *generic contract*, i.e. a contract which does not belong to any particular contract type (Chapters 2–7).

This volume will also focus on *payment obligations*. Payment obligations are characteristic of all financial instruments, and they can range from simple payment obligations in minor sales contracts and traditional lending contracts (Chapters 8–11).

1.2 Particular Contract Types

A number of particular contract types have been discussed in the other volumes of this book. (1) A certain party's investment contract can be another party's funding contract. Particular investment contracts will therefore be discussed in Volume III in the context of funding. (2) Many contracts are necessary in the context of business acquisitions discussed in Volume III. (3) Multi-party contracts are common in corporate finance. The firm's contracts with two or more parties range from syndicated loans to central counterparties' contracts. Such contracts will be discussed both in Chapter 12 and Volume III. (4) Many contracts with information intermediaries – such as auditors or providers of investment advice – or contracts relating to information were discussed in Volume I.

1.3 Examples of Topics

1.3.1 The "Perfect Contract"

The topics of this book can be illustrated by three examples: the "perfect contract", the nature of payment obligations, and the theory of the firm as a nexus of contracts.

Mix. What would be the "perfect contract" from the perspective of the firm? The firm has various commercial objectives depending on the context. A good contracts lawyer can identify the legal objectives of the firm, identify the available legal ways to reach them, design a contract in the light of the commercial objectives of the firm, and ensure that the other party accepts its terms. However, it is impossible to draft a contract that would be optimal for all contract parties regardless of their identity, the context, and the governing law.

The starting point is that each contract is unique, because each firm can be expected to act in its own self-interest in the circumstances. For example, it is not the purpose of an individual firm to allocate resources in the socially optimal way.

The firm needs a mix of contracts. For example, whereas some of the firm's contracts provide for flexibility, part of the firm's contractual framework should be rigid for risk management purposes. Moreover, each contract can consist of flexible and rigid elements.

Some general remarks can nevertheless be made as an introduction to the issues that will be discussed in this volume.

Define contents. First, an investment contract facilitates an investment. The firm should generally invest in projects that yield a return greater than the minimum acceptable hurdle rate. The contract can help the firm to define cash flow and the terms of the exchange of goods in advance. It will also help the firm to define its risk exposure, to exclude certain risks, and to choose the risk level that it is prepared to accept. This can require different things at different stages of the contract cycle.

In addition to (a) agreed terms, the contract is typically governed by (b) legal background rules (default rules) that apply to the particular contract type as well as (c) legal background rules that apply to contracts generally. Contract parties therefore use (1) practices designed for the particular contract type in question and (2) practices designed for contracts generally.

Manage information. Second, before the conclusion of a binding contract, the management of information plays an important role.

The firm will try to pick good contract parties and avoid bad ones. Obviously, the firm cannot do this without useful information. On the other hand, the gathering and analysis of information can be expensive, and information may not always be available and verifiable.

The other party will need information for its own decision-making purposes. However, the firm may not want to reveal too much. It may not want disclose confidential information – and perhaps not even non-confidential information – unless it regards the other party as a potential contract party.

Such factors will influence the mechanism used by the firm to screen contract parties and the choice of steps that lead to a binding contract.

In a mass transaction, the firm will use standardised processes and, possibly, automatisation to gather sufficient information about its potential customers. The firm will also use standard form contracts. In contrast, business acquisition contracts and important financial contracts are typically individually negotiated. Information will be disclosed and the contents of the contract will be determined gradually according to the following or similar steps: "cheap talk"; non-disclosure agreement; letter of intent or commitment letter; signing (and conditions precedent to closing); and closing. The contract becomes binding at closing.

It goes without saying that the firm will need information about the individually negotiated terms of the contract before the contract becomes binding. As the firm will need to define return and risk, the firm will also need some information about the legal background rules. The interaction of the agreed terms and the governing law or laws will play an important role.

The terms of the contract can be based on a "platform" or standard terms, and they can to a varying degree be individually negotiated. Typically, the firm can determine the parties' rights and obligations more precisely, if it excludes the application of dispositive provisions of law. Mandatory provisions of law force the firm either to adapt the transaction so that it does not fall within their scope, or to compliance. In many areas of law, the existence of mandatory provisions forces the firm to organise a compliance function (for compliance, see Volume I).

Define maximum and minimum obligations. Third, at a more concrete level, the firm should define at least its maximum obligations and the other party's minimum obligations in advance.

As regards *the firm*'s own obligations, the firm will try to define them precisely and require a "cap". In order to reduce legal risk, the firm often tries to exclude the application of dispositive provisions of law. If the firm's own obligations are open, the firm will try to qualify them. The firm will use a different technique for the *other party*'s obligations. The firm often tries to determine the other party's minimum obligations (and its own minimum rights) and require a "floor". As the firm does not always have full information about its legal needs, the firm may try to ensure that the other party's obligations are complemented by provisions of mandatory and dispositive law. The firm may also propose the use of open terms in addition to the exact "floor".

The core commercial terms of the contract will set out the division of the most important performances. They will always include the characteristic performances, and may include even some ancillary performances. From an economic perspective, the contents of the core commercial terms should depend on who is the "least-cost avoider". The allocation of work can typically be expected to depend on which of the parties will be more likely to bear the responsibility for each performance at a lower cost, and risk should basically be allocated in the same way.¹

Manage agency. Fourth, the firm always tries to manage the agency relationship between the parties in advance. The contract may contain several mechanisms

See Coase R, The Problem of Social Cost, J L Econ 3 (1960) pp 1–44.

designed to change the behaviour of the other contract party, ensure that the contract party will fulfil its obligations, and reduce agency costs.

Popular ways to mitigate agency problems include: clear contract terms and standards; decision-making rights such as ratification rights; transparency; alignment of interests (incitements); remedies (sanctions, indemnities); simultaneous performance (Zug-um-Zug, cash against delivery) or asking the other party to fulfil its obligations in advance; various forms of credit enhancements; avoiding "hold-up" situations; and an exit option.

After the conclusion of the contract, the firm may also be able to verify previously unverifiable information. For example, a new employee can be employed for a trial period. A new supplier will be asked to deliver small amounts before the buyer will agree on long-term deliveries. The contractor of a production system may agree to a construction/installation period followed by a testing period, the outcome of which will decide whether the delivery will be accepted and the buyer will pay the rest of the purchase price.

The use of remedies is an important way to manage agency. The sanctions should be effective. Typically, the obligations of the other party (such as "representations", "warranties", and "covenants"), the definition of "events of default", and the sanctions triggered by the occurrence of an event of default form a whole. The firm may prefer the sanctions to be cumulative (where the other party is the party more likely to fail to fulfil its obligations) or exclusive (where the firm is the party more likely to breach the contract). The firm tries to ensure that it has an option rather than a legal duty to invoke the agreed sanctions and that it will not be deemed to have waived its rights when it has not used them.

Manage the risk of changed circumstances. Fifth, in a "perfect contract", the firm will also have addressed the risk of changed circumstances. For example, the contract may have a short maturity instead of a long one, or the firm may combine open contract terms with dynamic terms, i.e. contract terms showing how the contents of the open terms must be fixed. The contract can provide for regular termination. Such a clause can be complemented by information covenants, a material adverse change clause, a force majeure clause, and/or a hardship clause.

1.3.2 Payment Obligations

All investment contracts contain payment obligations. As the *components* of payment obligations can be combined in different ways, one can identify different *types* of payment obligations and a *taxonomy* of payment obligations.

Different types of payment obligations can be used in different ways to ensure that the fundamental legal objectives of the firm (management of cash flow, risk, agency, and information) will be met.

For example, where the firm must pay a certain amount of money on a certain date, it can ensure that it will have liquidity on that date by agreeing on a matching fixed payment obligation of a third party. Contingent payment claims can be used to mitigate risk caused by the fact that the parties cannot have perfect information about future events. Contingent payment claims can also be used to mitigate agency problems by aligning the monetary interests of the principal and the agent.

While payment obligations can be used as legal tools to solve problems, they can also create new problems. This can be illustrated by the following examples. (a) An *intertemporal transfer* of value through time enables the debtor to obtain funding. However, this means that the lender will be exposed to a *credit risk*. The parties can use various kinds of credit enhancements to mitigate the credit risk. (b) The *transferability or negotiability* of claims means that the claim can be transferred. They are ways to manage some risks. On the other hand, they can increase other risks such as the debtor's *agency risks* or *counterparty commercial risk* (section 6.3). (c) The use of *contingent* claims can help a risk shedder to transfer many risks to a risk taker. On the other hand, contingent claims can be legally complicated and subject to a high *legal risk*.

1.3.3 Nexus of Contracts

The firm obviously cannot function without an extensive contractual framework. The firm can use contracts to change the behaviour of its contract parties.

Compared with many other behaviour-changing mechanisms, contracts have their own peculiar characteristics. First, contracts can be enforced against the parties. When the firm uses a contract to change the behaviour of its contract party, the contract can be enforced against the firm as well. Second, the contract is a legal concept. The firm must act in a certain way before a legally enforceable contract comes into existence. Third, the contractual relationship consists of more than the agreed terms. To a large extent, it is regulated by legal background rules. Fourth, the legal background rules and the terms of the contract must be interpreted before they can be applied. Fifth, the legal characteristics of contracts give rise to particular legal risks.

There is a difference between the contractual framework in the legal sense and the theory of a corporation being a "nexus of contracts". The nexus-of-contracts theory of corporations exists in economics or the economic theory of law (law and economics).² It says absolutely nothing about whether a relationship between two parties consists of rights and obligations that can be enforced by the court.

The purpose of this book is to discuss agreements that can create legally enforceable rights and obligations.

Alchian AA, Demsetz H, Production, Information Costs, and Economic Organization, Am Econ R 62 (1972) pp 777–795; Jensen MJ, Meckling WH, Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, J Fin Econ 3 (1976) pp 305–360; Zingales L, In Search for New Foundations, J Fin 55(2000) pp 1623–1653.

2 Contracts in General: The Legal Framework

2.1 Introduction

The core of contract law consists of three components: (1) a sanction system which can be applied when a party to a contract does not fulfil its contractual obligations (section 6.3); (2) basic requirements as to form and enforceability (section 5.6); and (3) rules on legal capacity, representation, agency, and similar matters (section 6.2; for the management of information, see Chapter 7 and Volume I).

The enforcement of contracts requires the existence of a sanction system. The sanction system gives an incentive to comply with contractual obligations. Although it is not the only legal mechanism to change the behaviour of the other party (for the management of agency, see Volume I), the availability of sanctions is the most fundamental legal reason to use contracts in the first place. In civil law countries, specific performance and damages are the basic remedies of the aggrieved party in the event of breach of contract. There are fundamental differences between civil law countries and common law countries regarding specific performance. In addition, punitive damages awarded in the US are not part of the laws of the Member States of the EU.

The basic requirements as to form and enforceability are roughly the same in all developed countries. The same can be said of defences to enforcement. (a) The parties must possess legal capacity to enter into contracts. (b) There must be an agreement. According to the traditional rule, an agreement consists of an offer and an acceptance. One party must have offered to enter into a legal agreement, and the other must have accepted the offer. (c) The contract must be in whatever form the law requires. For example, some contracts must be in writing, or evidenced in writing, or signed by certain people. (d) Common law jurisdictions typically require consideration, whereas civil law jurisdictions do not. (e) A further requirement is that the contract must be legal and must not infringe fundamental public policy objectives. (f) For example, the apparent consent of both parties must be genuine. This may require the absence of fraud.

Moreover, there are rules setting out what actions, information, and other circumstances are attributable to a party who is represented by others. Where a party is a legal entity, the persons representing it must have had power to act on its behalf. Agency and representation can require the simultaneous application of rules belonging to different areas of law (company law, contract, law, the law of representation and agency).

The legal framework of a contractual relationship. The legal framework of a contractual relationship consists of: mandatory provisions which cannot be dero-

gated from by choosing the law of another country to govern the contract; mandatory provisions of the governing law; agreed terms, and dispositive provisions of the governing law applicable to the extent that the parties have not agreed otherwise.

Cash flow, performances. The legal framework is designed to regulate what the parties must do. For this reason, it enables a party to determine cash flow and the terms of the exchange of goods and/or services.

In addition, the legal framework influences risk by influencing the behaviour of the parties and the variance of their performances. The legal framework therefore gives information about what the parties are likely to do.

Risk. Although contracts are a way to manage risk, contract terms do not always lead to the intended outcome. Moreover, contracts create new risks (see Chapters 4–6).

It is normal to distinguish between *legal* risks and *other* risks. However, most risks are affected by legal considerations in a contractual relationship.

For example, documentation risk, liquidity risk, credit risk, and many other risks depend on the applicable contract, collateral, and insolvency laws. In practice, many contributory legal risks have not been identified as legal risks at all. This is one of the factors making legal risk less quantifiable than other risks.

One can also distinguish between *endogenous* risks and *exogenous* risks. Endogenous risks are caused by possible actions or inactions of the contracting parties. Counterparty risk belongs to this category (see especially section 6.3). Exogeneous risks are caused by the possibility of changing external circumstances such as alterations in prices, demand or costs in the relevant industry or in the broader economy, for which neither party is responsible (section 5.5). The firm normally manages both endogenous and exogenous risks.

Information. The parties' views about the intended cash flow, the intended performances of the parties, and perceived risk depend on information. Large parts of contract law deal with information in one way or another.

For example, problems caused by information asymmetries can be mitigated in several ways. (a) The firm can address the problem of adverse selection by finding a way to equalise access to information (verification, inspections) and to shift the risk of loss to the party with the better information (warranties). (b) A third party can be brought into play. It is normal to employ intermediaries that produce and/or verify information, and to shift at least part of the risk to the intermediary.

Principal-agency relationships. A contractual relationship gives rise to an agency relationship. There is a risk that the contract party will not fulfil its obligations as agreed. The firm will therefore have to manage counterparty commercial risk (section 6.3). The management of counterparty commercial risk is even more important in long-term contracts.

2.2 The Legal Framework: General Remarks

2.2.1 Introduction

To obtain better information about the legal framework and to define its contents more precisely, the firm will choose: the *governing law*; the *contract model*; the substantive legal rules which work as legal *background rules* (default rules); and the *contract terms* which complement the default rules. The contract model and the governing law influence the conduct of the firm's representatives.

Substantive rules determine the obligations of the parties, the more precise contents of their obligations, the consequences of performance and non-performance, the modification of obligations, and so forth. There are more substantive legal rules for traditional contracts for exchange (such as the sale of goods) than for contracts for cooperation (such as sole distributorship). The former also tend to be more detailed than the latter. Substantive rules on various forms of cooperation are often open or vague and leave plenty of room for interpretation.

Typically, substantive legal rules contain: (a) rules that apply to contracts in *general*, and rules applicable to *specific* contract types (such as insurance contracts, contracts for the carriage of goods, contracts between a company and its shareholders, and so forth); (b) rules that may be *opted out* by the parties (dispositive rules, some mandatory rules), and rules that may *not* be opted out by them (some mandatory rules); as well as (c) rules that may be *opted in* by the parties (through choice of law or adapting the contractual relationship to fall within their scope).

Whereas *mandatory* rules of law leave parties no option but to adapt their behaviour (through avoidance or compliance), *dispositive* rules are merely default rules in the sense that they govern the contractual relationship only if the parties are not deemed to have agreed otherwise. The existence of dispositive rules can reduce transaction costs and make the drafting of contracts easier, because the parties only need to determine the essential terms of the contract and do not need to agree on every single aspect of their contractual relationship.

2.2.2 Platforms, Market Practice, Contract Models

The choice of the legal framework is influenced by transaction costs. In order to reduce transaction costs, the firm often uses pre-formulated agreements, master agreements, or a legal platform.

Market practice and global players Market practice influences transaction costs. The higher cost of adopting contract practices not used by other market participants – and the higher legal risk inherent in untried contract practices – can force the firm to use pre-formulated terms, contract models, and contract platforms shared by many market participants.¹

See, for example, Day JFS, Taylor PJ, Loan Documentation in the Market for UK Corporate Debt: Current Practice and Future Prospects, JIBL 12(1) (1997) p 8.