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THE LOSSES SUFFERED BY CREDITORS IN BANKRUPTCY IN THE UK AND GERMANY

Thesis submitted in partial fulfilment of the requirement for the Degree of Doctor of Philosophy

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ABSTRACT

Losses Suffered by Creditors in Bankruptcy in the UK and Germany
Barbara Stelzer-O'Neill

There has been much interest in finance theory in the question of how the cost of bankruptcy influences the firm's capital structure. Authors such as Modigliani and Miller (1956), Stiglitz (1969), Bulow and Shoven (1978), Titman (1984) and Barnea, Haugen and Senbet (1984) have provided much theoretical analysis. However, very few empirical studies have been conducted. Notable exceptions are those by Warner (1977) and Altman (1984). These studies looked only at bankruptcy cases in the US. One of the main problems in bankruptcy cost measurement is that there is little agreement on definition of bankruptcy cost components. In addition, the distribution of these costs has not been studied in any great detail in finance theory so far.

It is impossible to measure these costs since this involves the assessment of asset values at the hypothetical optimal time at which the company should have liquidated. Instead, this thesis tries to assess the magnitude of losses suffered by creditors in bankruptcy and their distribution in the UK and Germany. Statistical evidence on size and distribution is supported by six case studies on bankruptcy. The scale of losses and their distribution among claimants, differs between countries. Both, scale and distribution, are greatly influenced by the prevailing legal framework. With regard to the size of the losses, the conclusion is, that they are sufficiently large in both countries to influence the capital structure of their domestic firms. With regard to their distribution, those in the UK are largely carried by the individual creditors while those in Germany are born in large part by the tax payer. These differences make it hard to envisage how the UK and German capital markets can be successfully

integrated, as is proposed by the European Commission's 1992 legislation.

SECTION I HISTORICAL AND THEORETICAL FRAMEWORK OF BANKRUPTCY AND OF LOSSES SUFFERED IN BANKRUPTCY

CHAPTER 1 INTRODUCTION

1.0 PURPOSE AND FINDINGS

The aim of this thesis is to analyse the losses suffered by creditors in bankruptcy in the UK and Germany. The format of the thesis is exploratory, using available statistics. These are supplemented by case studies, which serve to underline the conclusions of the thesis. The reason for the exploratory format lies in the lack of detailed corporate data on losses suffered by creditors in bankruptcy, particularly in European (as against North American) countries.

Before the development of theories of capital structure in the 1950s and during the 1960s, bankruptcy was discussed mainly in terms of its legal and socio-economic framework. However, with the identification of bankruptcy cost as part of a company's capital cost, empirical studies on the financial implications of bankruptcy began to appear in the US in the late 1970s (1). The identification and the measurements of the components of bankruptcy costs has remained controversial. While these costs clearly influence the cost of capital in European countries, no detailed studies of their effect have been published so far. In addition, no comparative studies between countries have been undertaken on this subject.

The lack of such studies has influenced the structure of this thesis. In order to test the theory advanced by Modigliani and Miller, that bankruptcy costs influence the corporate cost of capital, the size and incidence of costs associated with bankruptcy must be established. If these costs have been priced by creditors in such a way that they are fully incorporated in the terms of trade or contracts, then they are not relevant in the corporate capital structure. If these costs represent unpriced losses suffered by creditors in bankruptcy, then they must influence the capital structure of a company. This thesis shows that the losses suffered by creditors in bankruptcy both in the UK and Germany are

not priced.

As well as the examining the size of losses suffered by creditors in bankruptcy, this thesis also examines their distribution. An efficient financing system should relate risk premia charged by creditors to their proportionate share of losses suffered by creditors in bankruptcy. If relative risk premia do not reflect the relative cost of bankruptcy, then these costs are shifted to an unsuspecting third party. Such inefficiencies lead to the systematic disadvantaging of third parties. Based on the findings of this thesis, the distributions of losses suffered by creditors in bankruptcy in the UK and Germany are inefficient in the sense that risk premia charged by creditors and other claimants do not fully account for losses suffered by creditors in bankruptcy. This inefficiency has been recognised by the legislature of both countries. While the steps taken to eliminate inefficiencies have been quite different, neither country has been fully successful. In both, society still pays a large share of the creditors' losses suffered by creditors in bankruptcy. The share is substantially larger in Germany than in the UK. This is due to differences in the role of claimants and in the respective corporate financial structures.

Finally, these differences in the distribution of losses suffered by creditors in bankruptcy in the UK and Germany raise interesting issues for the process of European capital market integration after 1992. It is difficult to see how both systems will be able to co-exist so long as the German system subsidises the cost of capital of its companies more heavily than the UK system, by paying for a large share of the cost of bankruptcy from tax payers' money.

1.1 METHOD

Our results are based on the analysis of publicly available economic and company data and informal interviews.

The size of the losses suffered by creditors in bankruptcy is established from published government bankruptcy statistics. These include bankruptcy trends, failure by size and age and coverage ratios, and costs of failure. Additional information is provided by published data on corporate structure and failure.
The analysis of balance sheet data regarding creditors and types of corporate finance has been used to establish groups of claimants and their degree of security. For Germany, data concerning the actual cost of borrowing for different types of creditors are published by the German Bundesbank. For the UK, comparable figures used are taken from the guidelines issued to managers of a major UK bank.

Details regarding the timing of bankruptcy have been obtained through personal interviews with bank managers of major German and UK banks. An interview with an insolvency practitioner helped to describe the actual bankruptcy procedures, and details of the types and size of costs of individual bankruptcies.

The sources used for the supplementary case studies are a combination of interviews, documentation given by the insolvency practitioners involved, and material publicly available due to filing requirements and newspaper releases.

1.2 CHAPTER ORGANISATION

The thesis is organised in three sections and eight chapters. The first section, chapters 1 to 3, deals with the historical and

theoretical framework of bankruptcy and losses suffered by creditors in bankruptcies. The second section, chapters 4 and 5, provides numerical support and documentary evidence relating to the size and distribution of losses suffered by creditors in bankruptcy in each country. The third section, chapters 6 to 8, illustrates the losses suffered by creditors in bankruptcy and its distribution on the basis of six case studies, three for each country. The findings are presented in the final chapter together with an analysis of the effects of an integrated market.

Chapter 2 provides an historical overview of losses suffered by creditors in bankruptcy and its distribution. It concentrates on the socio-economic problems relating to bankruptcy and on the development of bankruptcy legislation in the UK and Germany. Chapter 3 deals with the economic theory on bankruptcy. Recent evidence on losses arising through bankruptcy in the finance literature and the assumptions of the various bankruptcy cost theories are reviewed here. In addition, this chapter discusses the suggestion that the number and complexity of the parties involved in bankruptcy have a significant bearing on the losses and their distribution. Particular relationships among the parties can introduce imperfections affecting the probability of bankruptcy and the distribution of the losses. This may necessitate legislative intervention.

Chapter 4 identifies the statistical magnitude of corporate bankruptcy of the UK and Germany and relates these figures to type of incorporation and financial structures. Chapter 5 describes the mechanics of the bankruptcy process. The legal process of bankruptcy, the legal status of creditors and the contracts between creditors and debtors which stipulate credit terms, costs and security are compared in both countries.

The case studies of chapters 6 and 7 illustrate details of some typical bankruptcies in Germany and the UK. They serve to highlight the differences in bankruptcy procedures, the role of the legislation, and the losses and their distribution among the various parties involved.

The insolvent companies described here tend to be much larger than the average bankrupt company in either country. While this may give a distorted view of the relative bargaining positions of the creditors or owners in typical bankruptcy cases, it does highlight the differences between the two countries in the various groups of claimants. For the purpose of this thesis the size of the insolvent company is not relevant since the investigation focuses primarily on the relative position of the claimants and their influence on the losses from the insolvency and their distribution. With smaller bankruptcies it is difficult to obtain sufficient data to construct a case typical enough to illustrate the points here made.

All six companies represent typical German and UK insolvencies. Firstly, as they are older companies, they have none of the individual start-up problems which depend on a number of non-recurring factors such as a flamboyant entrepreneur whose company fails because of overborrowing or changes in market fashions. Secondly, none of the companies are influenced by the problems of family ownership which frequently lead to insolvency caused by internal quarrels among the family members (2). Finally, the insolvency of these companies was not the result of fraudulent behaviour on the part of the managers or other parties involved.

Chapter 6 describes three German case studies. Two of the companies, Beton- und Monierbau AG and PHB Weserhuette AG, went into liquidation, the third one, AEG Telefunken was rescued. Beton- and Monierbau AG shows the problem arising from a multitude of claimants and their respective legal rights in a bankruptcy. AEG

Telefunken highlights the dilemma of financial institutions who act both as major shareholders and as creditors. PHB Weserhuette explains the legal procedures involved in filing for bankruptcy and in asset distribution. The main interest in all three German case studies revolves around the role of the financial creditors and the distribution of the losses incurred through bankruptcy.

The selection of UK cases in chapter 7 follows the same guidelines as the German ones. All three companies are established, quoted on the stock exchange and their collapse was not preceded or accompanied by any criminal misconduct. Rotaprint plc. illustrates the procedural aspects of insolvency and receivership. Viners plc. looks at the problems of priority claims which faced the major financial creditor and led to his to decision to liquidate rather than assist in its rescue. Lyle Shipping plc. shows the conflict diverse interest groups find themselves in if the bankruptcy occurs in a designated area where state involvement is high due to large structural unemployment. In this case, the delayed bankruptcy contributed greatly to the losses. In all three cases the mechanics of bankruptcy and the role and motivation of the financial creditors are typical for a UK company insolvency.

Finally, chapter 8 summarises the findings of the comparison. While more detailed research on a greater number of insolvencies would be helpful to underpin the results numerically, the facts are as follows :

1. **Losses suffered by creditors in bankruptcy in both countries are significant** if, for example, measured in terms of loss of asset values. Assets sold in bankruptcy depreciate so substantially below their pre-bankruptcy book value that only a small proportion of creditors' claims can usually be satisfied (3).

2. **The distribution of the losses suffered by creditors in bankruptcy is different** in the two countries due to the different types of contracts between claimants and debtors.

3. **The effect of these losses on the corporate cost of capital is much larger in the UK than in Germany.** This is due to the German legislation which subsidises these costs by guaranteeing recompense to many of the claimants.

4. **Non-subsidised claimants tend to unload their portion of losses suffered in bankruptcy to the subsidised claimants in Germany** (4).

5. The two countries' different subsidy levels and different methods of preventing bankruptcies through takeovers and mergers leads to the conclusion, that **both systems will not be able to coexist in an integrated market.**

Notes :

(1) So far only Warner (1977) and Altman (1984) have published empirical investigations of the cost of corporate insolvency.

(2) Having said this, one should note that there is some tentative family involvement in the last German case presented. Some of the decisions made by the shareholder Otto Wolff AG in the PHB Weserhuette case, particularly the decision not to inject any more funds which precipitated the bankruptcy of the company, can be attributed indirectly to the influence of family members owning the Otto Wolff Group.

(3) For Germany, the net liquidation payment or coverage of claims for creditors not holding a lien on a specific asset amounts to less than 10% of their outstanding claims as shown in Table 4-6a and 4-6b. For England and Wales, this ratio is higher, namely 20%, though this only applies to unlimited liability companies as shown in Table 4-8. This large cost in the form of asset value reduction has also been pointed out by the leading insolvency practitioners in the UK and is discussed further in chapter 5.

(4) The case study of Beton- und Monierbau is a good illustration of the pre-bankruptcy activities of unsecured financial creditors.

CHAPTER 2 SOCIAL AND LEGAL TREATMENT OF BANKRUPTCY IN HISTORY

2.0 INTRODUCTION

This chapter will trace the debtor / creditor relationship through history and look at the factors that influenced the social and legal treatment of debt in the UK and Germany. The purpose is to establish a framework for defining creditors' losses through bankruptcy as these evolved from the social and legislative development.

Laws pertaining to the payment and default of debt have been known to exist long before the first legislation was written down by Hammurabi, the King of Babylon, about 1700 B.C. These laws and regulations addressed themselves primarily to the problem of liability of the debtor and to the rights of the creditor in case of default. The principle of early legislation was concerned with apportioning the equitable distribution of creditors' losses through bankruptcy and limiting it to the parties directly involved (1).

In typical early tribal societies prior to the large empires of Egypt or Mesopotamia, the borrowing and lending of commodities has its origin in the quest for greater economic prosperity through the division of labour. These activities were closely supervised in the tribal community where everybody had his allocated place. Work was executed to promote the welfare of the tribe rather than its individual members. Non-return of borrowed goods could thus be viewed as stealing if deliberate negligence on the side of the borrower could be proven and was punishable under tribal law. The disintegration of tribes and the formation of larger non-tribal communities required a more comprehensive set of rules. The individual began to acquire property in his own right and for his own wealth. Borrowing and lending activities took on a different complexion. The wealth of the community was not synonymous with the wealth of the individual any more. The non-payment of debt was now

a matter between two individuals. The rest of the community was not directly responsible for the cost. The new laws did not distinguish between criminal and accidental default but were designed to ensure that the creditor had a legitimised claim on the debtor (2).

In almost all societies the problem of bankruptcy first appears as a social problem. Initial solutions were found within the social community. Legislation on default came about when formal institutions became necessary to regulate social interaction. Formal legal institutions derive their reason for existence from the failure of self-regulation as shown by Burrows and Veljanovski (1981) who cite the failure of the market as the legal rationale for intervention. Market failures (i.e. failure of the economic forces to achieve an equilibrium) create external costs which they define as uncompensated losses 'imposed on individuals by some harmful activity'. If these uncompensated losses persist, the legal system has an obligation to restore social efficiency. The main obstacles to social efficiency lie in the creation of transaction costs. Under these, Burrows and Veljanovski include the cost of obtaining information, of searching, of negotiating and of enforcing agreements (3). Legal intervention thus itself involves a cost. The cost of legal intervention must be less than its associated social cost for the legislative process to be socially efficient.

The question of who bears the loss arising from default on debt has occupied many societies throughout history. The legal profession in these societies was concerned with two aspects:

1. to reduce the overall incidence of bankruptcy, and

2. to minimise the losses through bankruptcy to the individual creditor and the community at large (4).

These two objectives were subject to the constraint that the law should provide this service at a minimum cost to the state.

2.1 THE ORIGINS OF DEBT LEGISLATION

Debt legislation in Germany and the UK today derives from two origins. Firstly, it is part of the common laws and customs which influenced and regulated social behaviour of the individual tribes and were amended as need arose. This applies particularly to the early British legislation. Secondly, it is a set of legislation adopted from other societies and sometimes amended by local (tribal) customs, as can be found in Germany since the Middle Ages.

Originally, the direct ruling tribal groups did not recognise the existence of formal indebtedness among its members. Loans were given among members of this tribe as a form of emergency aid to avoid hardship. Though repayment was expected non-payment did not result in any prosecution. To stipulate interest on the loan was forbidden by most tribal laws (5). In the Western civilisation there was a need to formalise social behaviour through a set of common laws due to the enlargement of communities. To control the communities in an orderly fashion and ensure the wealth of at least the ruling classes, if not the whole community, agents were employed who were given powers to administer these common laws on behalf of the ruler.

In communities which were ruled through a system of employed administrators such as in Republican Rome the custom of formal lending and borrowing became more widespread. The burden of non-payment of a debt became the misfortune of the individual lender rather than that of the community as a whole. The lender had only legal recourse to the person of the defaulting however, but not to

his estate or that of his family and even here he was often limited. For example, in ancient Rome a full member of the community could not even be sold into slavery. While the twelve tabula of 451 B.C. provided for the right of the creditor to take debt owed to him in form of the creditors flesh (partes secanto) or even through selling the debtor, if he was not a voting member (Patrician), later Roman legislation in 313 B.C. (Lex Petelia) prohibited the direct retribution against the debtor's person (6). This opened the way to legislative intervention between debtor and creditor, an institution which, in its general structure, has not changed in countries like Germany since the time of Justinian (532 A.D.). The central theme was to deny the debtor his rights and status in the community. The means of punishing a default debtor was to initiate a social boycott against him.

Similar forms of punishment existed in communities which did not have an explicit set of common laws such as in China and India. There recourse against the debtor could only be obtained by branding him as dishonest, making him a social outcast or accusing him of a crime against a person. Max Weber (1964) describes the Chinese custom whereby the creditor when not paid by his debtor would consider committing suicide in order to persecute the debtor after death. In India, the creditor might hang himself or starve himself to death in front of his debtor's house. By sacrificing his own life his family had a legal claim of vengeance and could prosecute the debtor for murder (7).

The introduction of money into economic life had a profound effect on the capacity of borrowing. Demand for payment could now be transferred to a sponsor or even to a specified security when the original borrower defaulted. The lender was more inclined to advance funds if he could secure his loans against some specified property. In the early Middle Ages class structures and bondage systems allowed a further legal development. The individual free

debtor was allowed to sell himself into bondage. Initially this bondage contract was limited by time after which the debtor became a free citizen. With advancing feudalism bondage acquired more permanent features. Eventually it also extended to the debtor's family and became hereditary.

The bondage process often was initiated through the deliberate erosion of the livelihood of the debtor, particularly when he was dependent in his repayment on the sale of his merchandise to the creditor. Hereditary bondage systems occurred primarily in rural areas where supply and demand for goods were dominated by the large estate owners.

Hereditary bondage disappeared at the end of the feudal times in the late Middle Ages. In Britain, legislation such as the Habeas Corpus Act in the seventeenth century was specifically designed to limit liabilities to things rather than persons. On the Continent, Roman law prevailed in most countries with some interruptions in the early Middle Ages. With the manifestation of Justinian's civil codes in Germany in the 13th and 14th century the legal system provided definite guidelines for the interaction of debtors and creditors. Furthermore, it superseded Germanic and Langobardian laws, thus eliminating the Germanic system of bondage (Lehnsherrenrecht). By enacting such legislation the state undertook to shoulder some of the cost of debt collection through the provision of the means of administration and punishment.

The system of personal liability remained until the 19th century. In some countries bondage itself was replaced by a method whereby the creditor could keep the debtor in prison until such time as he could arrange for the repayment of his debt usually by his family or friends. The creditor had to pay for the upkeep of the debtor but the construction of prisons and the upkeep of its facilities was the responsibility of the state.

2.1.1 EARLY DEBT LEGISLATION IN BRITAIN

The first official legal reference to the problem of bankruptcy in the UK was made in 1542 under Henry VIII (8). The 'Act against such Persons as do make Bankrupt' was intended to make provisions for lawful claims of creditors against debtors defrauding with intent. The early law set out the conditions under which the creditors could force the compulsory sale of the debtor's assets. The claim was transferable to the heirs of the debtor. This meant that subsequent generations were still responsible for his debt. This Act was subsequently amended in 1570 under Elizabeth I (9). A commissioner was to be appointed to sell the property of the bankrupt and distribute the proceeds among the creditors in proportion of their claims.

Better protection for creditors was sought in a subsequent act in 1604 under James I (10). To stem the tide of bankruptcy severe personal penalties were imposed on the debtor. In stipulating that a debtor should stand 'upon a Pillary (...) by the Space of 2 Hours and have one of his Ears nailed to the Pillary and cut off' the law attempted to reduce the number of debtors clearly because the courts had problems coping with the numbers and costs of bankrupts. A further act in 1623 sought an improvement for creditors' claim by furnishing a more concise description of the bankrupt (11).

Despite these draconian measures bankruptcy continued to increase. Also on the increase was the number of absconding debtors. Another problem, which increased the cost to the creditors even further, were abuses in the system of imprisonment. The payments to prison wardens by debtors for privileged places in form of 'Chamber Rent' postponed the repayment of debt to creditors. The enforcement cost in bankruptcy became disproportionately large in relation to the actual amount of debt. The 1697 Act (12) limited the chamber rent to no more than 2s 6d.

Although some of the more drastic forms of punishment were abolished, the 1697 Act remained intact for more than 170 years. With the establishment of British penal colonies the losses arising through bankruptcy to the state and to the creditors could be contained. Unjust exploitation, however, increased.

2.1.2 PERSONAL LIABILITY AND THE COST OF DEFAULT IN THE 19TH CENTURY

The Bankruptcy Act of 1869 abolished imprisonment for non-payment of debt except for deliberate fraud in Britain. Similar German legislation followed in 1877. The abolition of bodily liability had been demanded in Parliament long before the 1869 Act was implemented. Early records of The Times indicate that previous proposals always met with opposition from the Lords and the Cabinet. On July 25, 1785 The Times reports on a House of Commons debate on a new insolvency bill which was brought forward by a Mr. Alderman Sawbridge. The bill was opposed by the Chancellor and other Lords and rejected by the administration in the House of Peers. Mr. Sawbridge's argument for the introduction of such a bill was as follows :

> '(It is said that) imprisonment is a security to creditor; the experience is to the contrary : to a swindler imprisonment is protection and retirement, to an honest man imprisonment is ruin (13).'

In an earlier House of Commons debate on the same subject a Mr. Taylor gives an indication of the total cost of suing and bringing a small debtor to justice. The total debt is frequently less than 15 pounds but 'the cost of suing to execution shall double that sum and of course the debtor will be imprisoned for forty-five instead

of fifteen pounds'. The court costs in such a small case amounted to more than 30 pounds to be borne by the creditors who tried to recoup it from the debtor (14).

While the state of the debtors' prisons was generally deplored, opposition to new legislation was strong, particularly among the members of the House of Lords. The debate on the Bill of Insolvency in Parliament in 1787 (15) came to nothing, as did many other attempts to reform. The government and peers were convinced that the existence of debtors' prisons was the best method to contain the spreading of insolvency.

That this was not so, can be seen by the sheer size of the problem. In 1790 it was estimated that the country housed some 8000 debtors in the respective prisons. Another 16000 debtors were fugitives fleeing from the law frequently by sailing to one of the colonies and beginning a new life there (16). Compared to today's statistics the amount of court bankruptcies in the nineteenth century appears very large. Until the new laws on bankruptcy were passed, the vessels heading for America and Australia were filled with debtors who were either escaping from the law or, in the case of Australian ships, imprisoned for insolvency. The costs of bringing a debtor to court increased with larger cases. The Times of August 7, 1867 presents a balance sheet of a bankruptcy proceeding as shown below (17). More than 20% of the net proceeds from asset sales went to the solicitors and on court costs and only about 40% of those proceeds were available for distribution to creditors.

RECEIPTS	£	s	d
Of Debtor	17	1	6
Sale of Stock, Horse Cart etc.	307	12	3
Shop takings	0	19	5
Rent paid by Purchaser	8	15	0
Sale of Lease & Fixtures	300	0	0
Total Realised Assets	634	8	2

Payments to Bank of England £265 18s 2d

PAYMENTS			
Solicitors & Court Costs	137	7	8
Wages in full	22	0	0
Rent, Rates & Tax	36	13	8
Possession	9	8	0
Messrs. Taxed Cost	9	1	10
Goods supplied to assignees	64	12	6
--- reassignment of Lease	80	0	6
Licenses per Lessors Solicitor	7	5	10
Balance Viz:			
in Bank of England £265 18s 2d			
with creditors assignees 2 0 0			
To creditors	267	18	2
Total	634	8	2

On smaller assets the proportions were even more distorted. The Times reported in 1868 that out of the proceeds of a forced sale of assets only £6 16s 8d of £103 10s 7d were available for distribution to the creditors (18). The remaining moneys were used to pay for court and legal costs. The rationale for legal intervention was clearly invalidated. Agency costs by far outweighed transaction costs making the legal intervention in the market an additional burden to credit collection. It was not surprising that debtors and creditors alike took to other means of settling their disputes. Nevertheless, opposition from the House of Lords was still strong at the time the new Bankruptcy Act was finally passed.

The first Bill in 1861 abolished the Insolvent Debtors Court. The second one in 1869 provided comprehensive legislation on the proceedings of bankruptcy. The 1869 Bill contained two components. The first, the Judgement Debtors Bill, abolished imprisonment for debtors unless fraudulent motives could be substantiated.

The second part considered the adjudication process. Its was an orderly disposal of the debtors assets. Under the new provisions, a debtor could declare himself bankrupt by filing a declaration of insolvency. This declaration, if accepted, by a court allowed the debtor 21 days grace before creditors were allowed to petition for adjudication. In essence, the declaration had to contain a list of all debts, creditors and assets of the debtor. Another feature of the Bill was the introduction of Statutes of Limitation. The creditors of a bankrupt had 12 months to put forward their claim. Any claim after that period was considered invalid.

Since the legal division of individual and company activity, the legislature addressed itself to the two groups separately. While an individual remained liable with his full assets, the owner of a limited liability company only lost whatever he had invested in that particular company.

Initial problems with the 1869 Act were great. In 1900 (19) a public discussion on fraud disclosed that 50,000 company bankrupts were not discharged. 10% of all bankrupts did not even bother to apply for a discharge. Proving fraud was almost impossible since no proper books were kept by the bankrupt company. Almost all subsequent amendments to the 1869 Act addressed themselves to the problem of just liquidation of bankrupt companies. There were no less than 10 amendments to the 1869 Act until finally the whole Act was repealed after an investigation by the Cork Commission. In 1985 a new Bankruptcy Act was approved by Parliament with a further

Insolvency Act coming into force in 1986.

2.2 DEBT LEGISLATION IN GERMANY

Unlike British law, German civil legislation originates directly from Roman law with only minor modifications. After the dissolution of the Roman Empire, Britain remained apart from the continental European development and was thus able to develop its distinct civil legislation. Germany, France, Italy and other European states maintained close links with one another, primarily because of border disputes and because of frequent separate or combined opposition to papal supremacy. Germany until 1806 consisted of a loose association of sovereign states which moved freely in and out of such bonds. Each state and city (free cities only) was represented in an assembly (Reichstag), one of whose tasks it was to enact and coordinate common policies and legislation.

German tribal law, which predominated in most of the German states from the 9th century onwards, was vague and lacked a common foundation. In the 13th century the Reichstag established the legal framework for all sovereign member states by adopting Justinian's written version of Roman law. In the area of civil law the legal system of Justinian's 'Corpus Juris Civilis' was reinstated, amended by the Roman Catholic Church's Corpus 'Juris Canonici' and the Northern Italian 'Libri Feudorum' (20). The state courts were financed by a special tax and made no distinction between penal and civil law enforcement. This system was not extended to the finance of the Reichstag's courts, with the result that judgement was only enforceable at state level (21).

Under Roman law, the bankruptcy process was a detailed sequence of actions under the supervision of a public court which consisted of legally trained state civil servants. The court's function was to

examine the legality of the creditors' claims and, when found justified, to appoint an administrator (Konkursverwalter) who was charged with the administration and disposal of the debtors assets. Actual bankruptcy proceedings by the creditors could be initiated for two reasons only:

1. Non-payment of legally upheld claim, and

2. Degree of indebtedness i.e. the creditor had to prove that the assets of the debtor were insufficient to cover his contracted debts.

Abscondment of an unconvicted debtor and death of a debtor without heirs were additional grounds for bankruptcy in pre- Justinian times.

Once the bankruptcy process was initiated the debtor was granted 30 days to pay his debt. At the same time the proceedings against him were published. After that period the appointed official receiver proceeded with the sale of the debtors assets and the distribution of the proceeds among the general creditors in proportion of their claims. Creditors who had special proven claims to particular assets were allowed to satisfy their claims first but only with the those assets.

Forcing the general creditor to relinquish portions of his claim necessitated the approval of the creditors' majority. This became also binding for the remaining creditors. Later additions to the law concerned the continuous obligation of the debtor since no official discharge was provided for. The institution of debtors' prisons was not widespread and only adopted by the less progressive states. It was restricted in 1577 Reichspolizeiordnung to fraudulent in all, and to monetary debts in some cases, since its cost did not justify the official expense to incarcerate a bankrupt

debtor. Debtors' prisons were finally abolished altogether in 1877.

Costs for the court expenses were fixed by law and paid out of proceeds, if these were sufficient. Court and associated administrative costs were borne by the taxpayer, that is, the free man in Roman and Medieval times. It appears, therefore, that Roman civil law regarded the cost associated with bankruptcy to be borne primarily by the creditors but also, to a lesser extent, by society as a whole.

This trend continued in the further development of bankruptcy law in Germany. When, in the 19th century, the independent states were amalgamated into one German state, a revision of the civil law became necessary. Many states had added their own particularities to the Roman civil laws, which they had adopted in the late Middle Ages. In order to unify the country, all additions to the code had to be reviewed. Furthermore, the Justinian civil laws themselves required some adaptations to the new economic circumstances. To this day the insolvency legislation of 1877 has survived with only one major addition to it in 1927 (revised in 1935), which allows for the reorganisation rather than the destruction of the business unit in difficulties. Even this addition took its roots from Justinian's legal system which allowed for a moratorium on payments and promoted an effort to re-establish the debtor rather than destroy his business. It had been omitted from the 13th/14th century German adaptation.

Not only in Germany was new insolvency legislation enacted. Legislators from Austria to Japan felt the need to adapt the old civil or common laws to the new industrial circumstances (22).

2.2.1 LEGAL DEVELOPMENT OF BANKRUPTCY AFTER 1877

A review of the relevant newspaper publications on the topic in the 20th century reveals that several German expert groups were less than happy with the Bankruptcy Code of 1877 (Konkursordnung). While agreement was universal about its original function relating to the orderly disposal of debtors' assets, complaints were voiced about the uneven distribution of information between the creditors (23). Other criticism extended to excessive duration and cost of bankruptcy proceedings. Economists became increasingly concerned with the implicit costs of bankruptcy caused by the destruction of a large economic unit and its effect on the economy (24).

The unified bankruptcy code of 1877 retains the control of courts over the administrative costs of bankruptcy. As a last resort, the general creditors can sue the lower court for excessive remuneration by the administrator in a higher court. That some payments to the appointed receiver are set at excessive levels is shown by a following newspaper article. According to the Frankfurter Zeitung of 20.2.1925 a higher court reduced the fees of one administrator from an original claim of 80,000 Marks to 8,000 Marks after creditors sued the lower court for excessive allocation.

The other criticism levied against the law was the time it took to settle general creditors' claims. Between 1907 and 1913 more than 50% of all bankruptcies were settled within one year. Only 9% of cases were still dealt with after 2 years. In the late twenties, only 41% of cases were settled within one year with more than one quarter of all court bankruptcies remained open (25).

Two main problems are currently being dealt with by the German legislature in their revision of the bankruptcy laws. Both problems arise from the changes in the overall economic development in the

last 75 years. Firstly, the destruction of large economic units through bankruptcy, i.e. companies employing more than 2000 people, results in a cost increasingly borne by the general public. Secondly, information technology contributes to an uneven information system regarding the financial state of a potential bankrupt.

The first problem had been recognised already in the early 20th century and led to a new code dealing with reorganisations of companies (Vergleichsordnung). The difficulty with this code at present is, that the majority of general creditors have to agree on a reorganisation before it can be initiated. In large bankruptcies creditors often do not have the total information as to whether reorganisation would benefit them more than bankruptcy (26). Not only unsecured creditors but also official receivers suffer the same problem. Since Roman times, the court appointed administrators have come from the legal profession. Lawyers frequently ignorant of detailed business matters are also one of the most unsuited professionals to restore a company back to health since the legal philosophy is concerned only with the just distribution of debtors' assets. One newspaper pointed out, that the German bankruptcy laws dating from the horse and waggon times and amended by a reorganisation code in the Nazi period are hardly equipped to deal with post-war bankruptcy cases (27).

The second problem is not unique to the German business environment. It has also been identified as a worldwide problem. Uneven information among creditors works essentially like insider trading on the stock exchanges. Upon advance information that a particular debtor approaches payment difficulties a creditor can demand more securities and secure his outstanding advances at an earlier stage. The example of Beton- und Monierbau, one of Germany's largest recent bankruptcies, which will be discussed later in this thesis, is a case in point.

2.3 SUMMARY

Earlier theoretical discussions on the topic of bankruptcy were confined to the legislative process. The explicit treatment of bankruptcy in other but legal terms (such as economic theory) only appears to have developed when businesses became separate legal entities influencing by their actions the wealth of the nation. The legal separation of the individual entrepreneur and his business activities facilitated the economic expansion during and after the Industrial Revolution. The greater impact of bankruptcy was an unavoidable by-product of this separation since the size of debt that could be incurred by a limited liability company grew in proportion to its assets.

The legal view of the bankruptcy problem has been constant in that bankruptcy in general is viewed as undesirable. The legal aim was directed towards the minimisation of the social costs either through prevention or supervised cost distribution. The method of handling such legal prevention has traditionally been different in Germany and the UK. The following chapter will look at the current economic debate of bankruptcy and its cost distribution.

NOTES:

(1) See Weber (1964). In chapters 7 (Rechtssoziologie) and 9 (Herrschaftssoziologie) Weber makes references to the civil laws of the early civilisations under Hammurabi, an Assyrian king, who was reported to be the first to provide written civil laws. Weber maintains that these laws were based on existing (tribal) laws and designed to provide a regulatory framework for trading activities.

(2) See Weber (1964) p.499. Originally every indictment was 'ex delicto'. A distinction between civil and criminal law did not exist within a tribal community. The existence of community law was replaced by self justice when the tribal communities broke apart.

(3) See Paul Burrows, Cento Veljanovski (1981), Burrows and Veljanovski analyse the economic functions of common laws from the point of view of welfare economics which seeks to achieve social efficiency.

(4) Early English common laws were designed to minimise the incidence of bankruptcy. Burrows and Veljanovski extended this to include the minimisation of the social cost of an activity (ibid p.11).

(5) According to Weber there could be no formal indebtedness in a legal sense among the tribe members. See Weber (1964), Chapter 7, p.518.

(6) See W. Uhlenbruck, B. Klasmeyer and B. Kuebler (1977).

(7) See Weber (1964), Chapter 7.

(8) See Halsbury, The Statutes at Large, Ruffhead Edition 1763, Henry VIII, 1542 chapter 4.

(9) ibid Eli I, 1570 chapter 7.

(10) ibid Jacob I, 1604 chapter 15.

(11) ibid Jacob I, 1623 chapter 19.

(12) ibid William III, 1697 chapter 27.

(13) The Times July 25, 1785.

(14) " May 7, 1785.

(15) " January 31, 1787.

(16) " March 4, 1790.

(17) " August 7, 1867.

(18) " November 2, 1868.

(19) " September 7, 1900.

(20) For a detailed discussion on the social and economic development of Germany in the Middle Ages see: B. Gebhardt (1965). E. Heilfron and L. Seuffert discuss in detail the history of German civil laws relating to the bankruptcy codes and their evolution from the older Roman laws. W. Uhlenbruck is at present Germany's foremost legal bankruptcy expert. His review of historical bankruptcy laws in Germany is designed to illustrate the need for a new and more relevant legislation in that area.

(21) See Gebhardt (1965) p. 683.

(22) See Uhlenbruck (1977) and (1983).

(23) Berliner Tageblatt 10.9.1924.

(24) Frankfurter Zeitung 5.12.1925 and Berliner Tageblatt 5.11.1929.

(25) Berliner Tageblatt 5.11.1929.

(26) Die Zeit of 18.3.1966 uses as example the case studies of Borgward and Lloyd Motorenwerke.

(27) ibid.

CHAPTER 3 ECONOMIC ANALYSIS OF BANKRUPTCY

3.0 INTRODUCTION

This chapter reviews the economic literature on bankruptcy costs and losses to creditors in bankruptcy, and relates the concerns of this thesis to those of finance theory.

An important debate in finance theory has focused on the effect of bankruptcy costs on the capital structure of the firm. This debate was initiated by Modigliani and Miller (1958) who demonstrated that the value of the firm is independent of its capital structure under two key conditions - the existence of complete and perfect markets, and a simple form of contracting between two classes of claimants, shareholders and bondholders (see Modigliani and Miller (1958), (1963), and Stiglitz (1969)). However, if bankruptcy costs exist, and interest payments are tax exempt, then even under these conditions the value of the firm does depend on its capital structure. Hence an optimal debt/equity ratio exists which will maximise the value of the firm. A number of empirical studies have attempted to measure the size of bankruptcy costs, with a view to establishing how important they are likely to be in practice in determining the financial structure of firms (1).

These models assume that when bankruptcy occurs, the costs of bankruptcy are borne entirely by shareholders, and the claims of the bondholders are paid in full. This is clearly unrealistic. In practice, the assets of bankrupt firms are often sold at "distress value", meaning that their value is less than the sum of the claims of the firm's creditors. These losses impinge more heavily on some classes of creditors than others, so that the assumption of a single homogeneous group of "bondholders" ceases to be helpful. To the extent that such losses are also anticipated by creditors, they will increase the cost of capital to the firm (by a risk premium). However, to the extent that they are not anticipated, there will be welfare losses to creditors, and a misallocation of capital to

the potentially bankrupt firm. These constitute additional costs of bankruptcy.

The size of losses to creditors, and their distribution, depends on how far it is possible to delay the time of bankruptcy, and on the relative power of different categories of claimant. For example, it may be possible for certain groups (banks) to "blackmail" the firm into delaying bankruptcy while upgrading the priority of their claims on the firm's assets. This in turn will depend on the framework of law and institutional practice within which the firm operates.

The chapter is organised in five parts. Part 1 establishes the terminology of insolvency, liquidation and bankruptcy including the cost of bankruptcy. Part 2 presents the definition of bankruptcy cost. Part 3 looks at the main studies relating to bankruptcy costs. Part 4 presents the concept of losses to creditors in bankruptcy as part of bankruptcy costs to the firm. In particular, the impact of imperfect secondary markets, the existence of agency costs, asymmetric information and complex contracting - the main contributors to losses to creditors - is discussed here. Finally, Part 5 looks at the problem of the distribution of these losses and the role of the legislature.

3.1 LIQUIDATION, INSOLVENCY AND BANKRUPTCY

The liquidation of a firm occurs when its owners decide to discontinue the business in its existing form. The firm is then wound up and sold either in operating parts or as individual assets. A liquidation may be voluntary or compulsory. In complete and perfect markets without taxes, only voluntary liquidation can exist. If the firm goes into voluntary liquidation, all debt claims will be honoured in full. A company may go into voluntary

liquidation for a number of reasons such as low profitability, (present or forecast), retirement of the manager without any successors, or obsolescence of the product range.

Voluntary liquidation implies that the firm chooses the time of dissolution. The optimal timing of liquidation (Titman (1984)), is when the (net) liquidation value just equals the value of the company as a going concern (2).

Compulsory liquidation occurs when the firm is forced by its creditors to sell its assets, because it cannot fulfil its contractual obligation. At that stage the present value of equity returns is zero. In the majority of cases compulsory liquidation is the result of bankruptcy, that is, it is forced by creditors seeking compensation for their unpaid claims. Compulsory liquidation can also occur for other reasons and may be forced by the government. A company which refuses to comply with current environmental regulations, for example, may be forced to close down. If the timing of liquidation is not determined by the principle of value maximisation to the shareholders then additional costs may be imposed on the firm.

Before debt holders are able to liquidate a company, they must prove that the company is insolvent. A company becomes insolvent when it is unable to make contractual payments, usually to the creditor. These contractual payments may be in the form of interest and repayments to bondholders or simple payments to trade creditors. There are two causes for insolvency :

1. The cash flow of income streams does not match the cash outflow of contractual payments, or (and)
2. The present value of income streams is less than the present value of cash outflows.

The first cause will not occur in perfect markets since income streams can be matched to cash outflows by borrowing and lending.

An insolvent company may be rescued by outsiders by means of a financial cash injection in the form of equity or debt, through merger with another company or through a takeover. If the insolvent company is not rescued then the creditors may initiate bankruptcy proceedings.

Technically, the status of bankruptcy describes the legal process governing a company which has become insolvent (see Meckling (1977), Hax (1985) and White (1988)). Aghion and Bolton (1988) view bankruptcy as a mechanism for determining exactly how and when ownership is transferred from shareholders to creditors (3). In order for a company to be declared bankrupt by the authorities, the debtor has to forward proof of his claim. There are national variations in the legal framework of bankruptcy. In the UK the term 'bankruptcy' is reserved for individuals only. Companies which become insolvent are either put into receivership by the creditor, that is, the creditor takes (temporarily) charge of the assets, or are compulsorily wound up by court order. In the latter case, the court appoints a liquidator who disposes of the assets. In Germany and the US the term bankrupt refers to a court order by which a company is declared bankrupt. Prior to the actual declaration of bankruptcy, the court will investigate whether the company should be liquidated or rescued.

Though the term bankruptcy is used by both the economic and legal literature, it should be borne in mind that there exist significant differences in the legal and economic meaning of bankruptcy. The aims and objectives of economist and lawyers tend to be quite different as Philip Shuchman (1977) describes in the following :

"Lawyers tend to view the bankruptcy system differently. Lawyers view bankruptcy, at least when there are assets, as properly concerned with the equitable treatment of creditors when debtors' assets are insufficient to pay all his creditors in full. That is, lawyers are concerned with the distributive aspect of bankruptcy. Economists tend to concentrate on the allocative impact of bankruptcy. Thus for economists bankruptcy is but another aspect of money market mechanism". (4)

For purposes of this discussion the term bankruptcy is used when two conditions are fulfilled :

1. The company is insolvent and has defaulted on its contracted payments, and
2. The value of its future income stream is widely perceived as being less than the value of its outstanding debt.

3.1.1 THE COST OF LIQUIDATION IN PERFECT MARKETS

Under the assumption of perfect capital markets, but allowing for taxes, the costs of liquidation are known to and priced by both the bondholder and shareholder (see Drukarczyk (1986,2) and Meckling (1977)). Liquidation costs incorporate costs associated with the sale of the company or its assets. They accrue in the form of administration charges resulting from the legal formalities of company dissolution and from agency charges if the owners place the handling of the sale of assets in the hands of agents. The total value of the liquidated company including these costs must be equal to the value of the company as a going concern otherwise no liquidation will take place.

In perfect markets with complete information and rational agents, liquidation costs in compulsory liquidation or bankruptcy do not differ from those in voluntary liquidation (Webb (1988)). In compulsory liquidation debt holders instead of equity holders dispose of the assets of the company. While in voluntary liquidation the aim is to maximise shareholder's wealth, in compulsory liquidation the objective is to satisfy the claims of the debt holders. Thus, in perfect markets the sale of assets yields the present value of total debt claims.

3.2 BANKRUPTCY COSTS

Before discussing the relevance of bankruptcy cost to the firm's capital structure decision, some terminology needs to be clarified. The finance literature distinguishes between direct and indirect bankruptcy costs.

Most authors agree on the existence of direct costs but maintain that these are not significant enough to have an impact on the firm's capital structure decision. Direct bankruptcy costs accrue from the legal process of bankruptcy.
Indirect costs can arise even without the firm going into liquidation, for example, the increased probability of bankruptcy will reduce the firm's value.

3.2.1 DIRECT BANKRUPTCY COSTS

In perfect markets direct costs are restricted to costs relating to the transfer of ownership from the shareholder to the debt holder. Barnea, Haugen and Senbet (1984) define direct costs as those 'involved in resolving the disputes between capital contributors over their respective rights in the event of

bankruptcy' (5). These include court and legal costs, accounting and administrative costs but not costs relating to the disposal of assets.

Altman (1984) and Webb (1987) similarly include in their definition costs arising from the execution of bankruptcy proceedings which centre around legal, accounting and administrative costs. Direct costs as defined by Altman consist of filing fees, trustees expenses, legal and accounting fees and costs associated with reorganisation or liquidation.

Myers (1984) includes in his definition of direct bankruptcy costs not only legal, administrative costs but also agency, moral hazard, monitoring and contracting costs. His definition, therefore, not only covers costs relating to the transfer of ownership but also costs accruing through the use of management (agents) prior to and during bankruptcy. Agency costs occur when the agents of the owners make above-normal charges for their involvement in the transfer of assets. As a firm approaches insolvency managers face the potential loss of their livelihood. They may therefore leave the firm prior to insolvency and cannot be replaced under the same terms of contract, and may be induced to stay only with additional compensation. Moral hazard costs may arise out of the conflict between the self-interest of the agents and the interests of the owners or creditors. While it may be in the interest of the owners or creditors to liquidate the firm at one particular point in time, the agents may prefer to postpone this event to allow more time to negotiate new contracts or alternative employment. On the other hand, agents may delay liquidation beyond the optimal point to maximise their personal wealth. Only by paying more can the owners ensure that the agents follow a liquidation policy that maximises the shareholders' wealth. Titman (1984) argues that agents will pursue a non- optimal liquidation policy when the probability of bankruptcy increases, unless they can receive adequate

compensation.

3.2.2 INDIRECT BANKRUPTCY COSTS

Indirect costs are due to the effects of the probability of bankruptcy on the profitability of the firm. They arise before the firm actually goes into bankruptcy and will tend to accelerate the timing of bankruptcy. Indirect costs arise because markets are imperfect.

According to Altman (1984) indirect costs include lost sales, lost profits, higher costs of credit, lost investment opportunities and the cost of lost managerial energies.

Kim (1978) similarly suggests that indirect costs in the form of lost profits, higher costs of credit etc. accrue to the shareholders when a company reorganises. In addition, Kim (1978) notes that if the company is liquidated there may also be losses arising from the liquidation of assets at "distress" prices. This, he claims, is due to the imperfection of secondary markets for assets. Since at the time of liquidation the shareholders have relinquished their claim on the firm's assets, the losses must be attributed to creditors of the firm. In anticipation of the imperfection of the market for secondary assets creditors may pass the losses on to either the shareholders prior to liquidation or to each other.

The existence of indirect cost of bankruptcy has been widely discussed in the theoretical literature. However, as Brealey and Myers (1981) note the empirical evidence for the existence of indirect costs is circumstantial. Indeed, Altman (1984) notes that it is difficult to put precise values on these indirect costs. This is because it is hard to measure the strength of the non-pecuniary

relationships between the potentially bankrupt firm and its customers and suppliers.

Accounts of two major insolvencies in the US, Penn Central and Chrysler Corporation, for example, blame the existence of indirect costs on market inefficiency such as the inability of creditors to write explicit contracts and the 'irrational behaviour of creditors' (6). The Penn Central bankruptcy in 1970 was costly because creditors were unable to agree on a common course of action. For Chrysler, the argument against such a market solution of reorganisation was based just on these lines. The Chrysler president maintained that the indirect costs of reorganisation, when left to the creditors, were prohibitive, and would lead to the ultimate destruction of the firm - a fate which was more costly to all parties concerned. Comments on both the Penn Central bankruptcy and the state-led Chrysler rescue indicate that, in practice, the pure market solution is frequently not considered feasible, not only because of the vested interest of agents, but because of the impracticality to write complete contracts between the large number of claimants. The one time this market solution was explicitly adopted by a financial creditor, in the AEG rescue, it failed and contributed to the already substantial losses to the creditors concerned. (The AEG case is discussed in detail later in Chapter 6.)

3.3 CAPITAL STRUCTURE AND BANKRUPTCY COSTS IN FINANCE THEORY

If bankruptcy costs exist, they reduce the value of the firm to its shareholders. In addition, the incidence of bankruptcy costs may mean that the value of the firm is not independent of its capital structure.

For example, the availability of a tax shelters, i.e. the shareholders' tax benefit from interest payments to bondholders, leads to an optimal, value maximising capital structure (see Modigliani and Miller (1963)). Because of the tax shelter, shareholders have incentives to sell additional claims on income to bondholders who in turn will charge additional risk premia for holding these claims. Shareholders will proceed with selling such claims until the marginal benefit from the tax shield is equal to the risk premium charged (Brennan and Schwarz (1978). Such capital structure optimisation is described as a 'trade-off between the tax advantage of debt and bankruptcy penalties' by Kraus and Litzenberger (1973) (p.915).

In perfect markets the present value of the risk premia charged by bondholders is equal to the expected value of losses arising through default of the firm on contracted payments. In imperfect markets the risk premia may be larger than the expected value of these losses. This would lead to the firm being undervalued i.e. shareholders transferring a portion of their wealth to bondholders. Alternatively, if the risk premia are smaller than the expected value of losses then the situation is reversed. Shareholders benefit from artificially cheap finance and the company is overvalued.

Neither overvaluation nor undervaluation can occur in efficient markets. Therefore, there are no unanticipated losses from bankruptcy. The decision to liquidate remains a capital budgeting decision and does not influence the capital structure of the firm (Haugen and Senbet (1978 and 1988), Senbet and Taggart (1984)). Liquidation occurs at the optimum time. Only direct bankruptcy costs then influence the capital structure. Since these are likely to be small, the effect on capital structure is also likely to be negligible. In support of this proposition, Webb (1987) shows that bankruptcy costs will not be incurred in perfect markets since

involuntary bankruptcy does not occur and bankruptcy costs can be internalised (7). Webb does, however, question whether in reality such perfect markets exist.

Whether or not markets are indeed perfect depends, among other, that all agency costs are anticipated, that all parties are fully informed and are able to write complete contracts.

3.3.1 THEORETICAL ARGUMENTS

Theoretical arguments, that bankruptcy does not influence the financing decision of the firm, come from authors such as Haugen and Senbet (1988), Barnea, Haugen and Senbet (1984) and others. Their claims are based on the market efficiency studies by Sharpe (1964), Fama (1970) and Jensen (1972) and incorporate market solutions to impediments to market efficiency.

The main arguments of Haugen and Senbet (1988) run as follows. All contracts between debt holder and equity holder are complete i.e. they incorporate all information available about risk. Contracting is continuous which allows for changes in the contract when circumstances change. Information about changes are communicated instantaneously to all claimants. In addition, liquidation values of assets are known prior to bankruptcy.

Agency costs arising ' from conflicting interests among parties to the corporate firm such as managers, capital contributors, employees, customers, suppliers and government (9)' can be in principles satisfactorily resolved through the market (Haugen and Senbet (1988)). Agency costs associated with debt (owner/creditor dispute) can be similarly eliminated by capital reorganisation. For example, creditors may purchase equity. Agency costs associated with equity (owner/agent dispute) may be eliminated by including

incentive provisions in the agent's contract. If the agency problem is not a continuous one, but only appears at a fixed point in time, informal capital reorganisation is not a feasible solution. However, agents can still be disciplined through complex contracting 'in the form of call provisions, conversion privileges, or executive stock options' (10).

The costs of information inefficiencies can be avoided (a) through the mechanism of an outside takeover which eliminates the necessity to go through the court system altogether and (b) by ensuring that information is evenly distributed through a managerial incentive system. Haugen and Senbet (1988) maintain that, with the transfer of ownership from shareholder to bondholder in the event of bankruptcy, both groups find themselves on an even footing with regards to the acquisition of information.

Aghion and Bolton (1988) argue that (a) complete contracts of the kind discussed by Haugen and Senbet are unlikely to exist, but (b) complete contracts do not need to exist in order for the shareholder-bondholder conflict to be resolved. They maintain that incomplete contracting and potential conflicts between bondholder and shareholder leads to more specific allocation of control at initial contract stage. That is, certain assets are assigned to individual bondholders. With increasing incompleteness of contracts, the conflict between bondholder and shareholder becomes greater. This implies that bondholders will seek to secure more assets when the probability of bankruptcy increases. The bondholder does not increase his risk premium in the contract, since he cannot assess the risk adequately. Thus, incomplete contracting leads to a shift in the company valuation from the income stream to the physical assets. There will be a curtailment in lending when all physical assets are encumbered. The risk remains with the shareholders. In this instance, bankruptcy costs can be adequately priced and the possibility of added costs due to market

inefficiencies is very small.

Scherr (1988) notes that several of the underlying assumptions of the Haugen and Senbet argument are unrealistic. In particular, he criticises the assumption that there exists a perfect market for physical assets, which is the main precondition for their hypothesis that the liquidation decision is independent of bankruptcy. Indeed, even in perfect markets the Haugen And Senbet argument is not sustainable. Given a certain production process, work flow and product market the assets of a firm become almost unique. If these assets are separated from each other - as occurs in compulsory liquidation - these assets require extensive adapting to other production process and markets, with the effect that the liquidation value must be the market value of these assets minus the cost of adapting these assets for the new owner.

Most of the theoretical arguments for the irrelevance of bankruptcy costs rest on idealised assumptions as far as the financial markets and their participants are concerned. Imperfect information, additional agency costs, and incomplete contracting can be eliminated in these models by individual parties through invoking certain market mechanisms i.e. arbitrage, financial restructuring, continuous contracting or restricting the amount of debt in the capital structure. However, most authors admit, that suboptimal allocation of resources will occur when markets are not efficient and the participants do not act rational as a group. In fact, many authors doubt that such an ideal world exist (see for example Stiglitz (1972), Webb (1987), White (1988)). In an imperfect system, costless solutions to problems such as incomplete contracting, disputes between claimants do not exist. These costs therefore become a part of the indirect bankruptcy costs and will influence the capital structure.

3.3.2 EMPIRICAL EVIDENCE

Empirical evidence of the relevance/irrelevance of bankruptcy costs in the financial structure of a firm comes primarily from Warner (1977), Altman (1984), Franks and Torous (1989) and Castanias (1984).

Warner (1977) looks at the direct bankruptcy costs of eleven bankrupt railroad companies between 1933 and 1955. His aim is to identify those costs which are not present in insolvency alternatives such as mergers or restructuring. Warner shows that the costs averaged 5.3% of the firms' market values prior to filing for bankruptcy. He identifies a scale effect with the percentage cost decreasing with increasing size of market value. In his study, the smallest firm shows a cost of 9.3% and the largest a cost of 1.7%. The main criticism of the results of this study centres on the sizes of the selected firms - the smallest had a market value of $10 million - and on his definition of bankruptcy cost. Costs in his study consist of the costs of filing, handling and disposing of the assets. They do not take into account losses to creditors in terms of unmatched claims or insufficient compensation in the form of sufficiently high risk premia. Warner concludes that bankruptcy costs are small but admits that the results of his study have only limited application for the evaluation of bankruptcy costs of other firms.

Altman (1984) investigates the bankruptcy costs for 12 retailers and 7 industrial companies gone into bankruptcy between 1970 and 1978 in the United States. Direct costs for both categories of firms average around 6%, with retail companies lying below this average and industrial companies above it. Altman also identifies a negative correlation between size of cost and the size of the company.

In his empirical study on the measurement of bankruptcy costs he defines indirect costs to include lost profits which 'a firm can be expected to suffer due to significant bankruptcy potential' as well as 'the ... inability to obtain credit or issue securities to finance new opportunities' (11). Altman uses a loss-of-profit method to measure the decline in profit in the years prior to bankruptcy and compares this to the market value of the firm. He measures the indirect cost by estimating expected profits for a period of up to three years prior to bankruptcy. These profits are compared with actual profits (or losses) to determine the size of unanticipated profits or losses which are taken as proxy for indirect bankruptcy costs. The expected profits are estimated on the basis of regression procedure and security analyst forecasts. The average indirect costs range between 11% and 17% based on regression techniques. Altman concludes that his results suggest that bankruptcy costs are relevant, with some costs exceeding 20% of asset value. The comparable result based on analyst forecasts is even higher, averaging close to 20% for indirect costs alone. In Altman's case the indirect costs are attributed to the shareholders' value indicating that high bankruptcy costs artificially move the optimal time of liquidation forward.

Franks and Torous (1989 and 1991) compared the formal cost of bankruptcy in Chapter 11 of the 1978 US Bankruptcy Reform Act with the cost of informal reorganisation on the basis of the size of writedowns of creditors' claims. Of a total sample of 88 firms, 47 firms reorganised informally through 'workouts' and 41 firms reorganised under Chapter 11. Comparing the size of writedowns of claims, these averaged 23% for the creditors in informal reorganisation against 47% for creditors in court supervised reorganisation. Formal reorganisation appears to be a more expensive option than informal 'workouts'.

Castanias (1983) examines the relationship between failure rates and leverage ratios for 36 lines of business. His aim is to test the hypothesis that the existence of tax shelters and probability of failure will influence the leverage decision of the firm. The probability of failure is measured by using historical failure rates compiled by Dun and Bradstreet and structured according to business lines and size. Increases in the probability of failure are said to occur when a shift occurs in the earnings distribution of the firm. This, in turn, also raises the marginal default costs and lowers the expected marginal tax savings. Assuming that one can identify a systematic negative relationship between observed leverage measures and historical failure rates, then there exist a definite link between probable failure and capital structure decisions. Castanias tests this hypothesis using correlation coefficients of seven different relevant ratios. His results are significantly different from those obtained under the assumption of capital structure irrelevance, and he concludes that industries with greater probability of failure have a smaller leverage range. Ex ante default costs are large enough to have a substantial impact on the financing decision of the firm. Castanias does not include measured direct or indirect costs associated with the reorganisation or liquidation of the firm in his tests. He argues, however, that the existence of such costs enforces the results of his conclusions.

3.4 LOSSES TO CREDITORS IN BANKRUPTCY

This section looks at losses to creditors due to the liquidation of asset values below their economic values, and at whether these losses are incorporated in the contracts between the firm and its creditors. The only empirical studies on this topic so far can be found in the accounting literature and daily financial press. These restrict themselves to commentaries on the statistical results of

individual bankruptcies rather than elaborating on their implications for finance theory.

In general, we can distinguish between those losses in asset values which the creditors can accurately anticipate, and those which are impossible to price prior to bankruptcy. In the first case, the impact on the firms capital structure is small, since creditors will simply restrict their lending activities to the value of the assets, as Aghion and Bolton (1988) point out. In the second case the impact is positively related to the size of losses and may be quite large.

3.4.1 ANTICIPATED LOSSES TO CREDITORS

Creditors may try to anticipate their losses in two ways. Firstly, they may curtail their lending to the firm in the run up to bankruptcy, essentially forcing the firm into liquidation at a point they see as optimal. Secondly, they may impose high premia on their loans in order to capture any potential losses through the forced sale of assets. These anticipated losses assume that lenders are fully aware of the market value of assets in forced liquidation.

Creditors can only fully anticipate possible losses of asset value in liquidation and subsequently compensate for these in their credit terms and rate, if (a) there exists a perfect secondary market for assets, (b) accurate information about that market can be obtained, and (c) individual creditors can formulate complete contracts. If these conditions obtain, there can be no external bankruptcy costs, and the Haugen and Senbet (1978) irrelevancy argument holds. As before, the next step is to relax the underlying assumptions of perfect markets, accurate information and complete contracts.

3.4.2 UNANTICIPATED LOSSES TO CREDITORS

Unanticipated losses to creditors may occur when creditors are not able to accurately price the assets of a firm prior to liquidation. This can happen when there is no market value for assets sold in distress and/or if the timing of bankruptcy influences the value of assets. Three impediments to the pricing of assets of firms in distress are discussed here:

a. The difficulty in pricing **rarely traded** secondary assets,

b. the number and strength of some **creditors** who can influence the timing of bankruptcy of their debtor in order to improve their relative position, and

c. the ability of **agents** to manipulate the timing of bankruptcy of the firm by concealing that the firm is in distress.

These unanticipated losses should be added to the indirect costs of bankruptcy. They lead to unresolved disputes among claimants, and may invoke lengthy and costly arbitration, depending on the state of the secondary market for assets, the position of the creditors and the power of the agents.

3.4.2.1 THE SECONDARY MARKET FOR ASSETS

Accurately assessing liquidation values of assets prior to actual liquidation depends on competitive pricing. If there is an active market for such assets, which implies that the assets to be valued are not unique to one specific firm, then competitive pricing of assets should be possible. In reality, many assets of a firm are

rarely traded and are therefore difficult to price. These include items such as inventory, fixed assets used in the manufacture and some purpose-built accommodation. Accounting values are rarely helpful in identifying the actual value of such assets.

A second problem occurs when there is a time constraint placed on the sale of such assets. This happens frequently in forced liquidation or bankruptcy. The 'distress' prices of those assets are frequently different from their liquidation prices under non-distress conditions. To assess the amount of value lost through distress requires the correct forecasting of the time of bankruptcy.

3.4.2.2 MULTIPLE CREDITORS AND UNANTICIPATED LOSSES

In finance theory, creditors have frequently been looked upon as a homogeneous group acting in unison. More recently, studies have considered the implications of having several differently motivated classes of creditors and other claimants. Some studies look at the problem of multiple claimants from the aspect of violating the priority rule - a problem which involves the existence of incomplete contracts. Aghion and Bolton (1988) and White (1988) acknowledge that increasing the number of differential claimants is likely to lead to increases in unresolved disputes between these claimants. Franks and Torous (1991) suggest that the need for intricate bargaining between claimants necessitates formal bankruptcy proceedings in order to resolve their disputes. If the secondary market for assets is inefficient, and there exist large unanticipated losses, the priority claims of a large number of claimants with explicit or implied contracts are difficult to resolve.

Claimants can usefully be regarded as falling into seven categories:

1. Shareholders
2. Financial Creditors
3. Trade Creditors/Suppliers
4. Managers or Agents
5. Employees
6. Customers
7. Government/The General Public

Shareholders, regarded as a homogeneous group in the theory of the two-party firm, may further belong to different groupings. Some shareholders may be financial institutions such as pension funds or insurance companies. They may be industrial corporations, as is often the case in Germany, or they may be governments or individuals. Equity is issued in various forms such as preferred equity and common equity. Hybrids such as convertible bonds may also exist.

Creditors are a diverse group which can hold a range of debt instruments, either secured by specific assets or unsecured, either short term or long term. Some creditors are trade creditors or suppliers as distinct from financial creditors.

In addition, other claims against the firm accrue from diverse interest groups. Managers have a vested interest in the firm, since the firm provides the means of their livelihood. At the same time, they are charged to act in the best interest of the owners. Employees have invested their time and labour in the firm. In Germany, part of their earnings is used to finance the investments of the firm. Any contracts between creditors and equity holders must take account of the firm's liability to its employees.

Customers demand the right to cancel their purchase commitments, to alter the product specifications and to receive a guarantee for the safety and reliability of a product. Consumer watchdog associations can initiate boycotts against companies who do not adhere to their guidelines. The government guards the welfare of the public at large. Changes in legislation are designed to benefit the general public. These may include legislation regulating car emissions, safety standards or environmental protection regulations.

In reality, it becomes more complex to define the individual claim on the firm of each member of the group and its priority ranking within the hierarchy of claims. Changes in the firm's business activities may affect the status of the claimants differently. A change in the product range may increase the degree of riskiness of the firm and the probability of default. Financial creditors can usually guard themselves against such changes with clauses or indentures in their contract with the firm. These clauses allow a renegotiation of the terms of the contract. In addition, changes in the product range usually affect the composition of the workforce. Again, existing contracts need to be renegotiated and new grading systems agreed upon.

With increasing complexity, the probability of incomplete contracts increases which may lead to temporary or even permanent market inefficiencies. In a complex system of contracting renegotiations of contracts which are necessary because of changed circumstances and are stipulated through indentures in the contract, may not occur when required. Additional costs may arise from the supervision of the contracts. The complexity of these claims originates from three main areas: information, contracting and supervision of contracts.

Firstly, a potential new claimant needs information on all existing contracts to be able to assess the risk of his own contract. The contract of a new claimant must relate his expected risk to his promised return given the priority claims of other contracts.

Secondly, managers must write complete contracts to ensure that the value of the firm is maximised at all times. Incomplete contracts lead to additional costs in that they promote conflicts among the various claimants.

Finally, contracts must be supervised and enforced. In many countries the supervision and enforcements of the contracts between the claimants has become the task of the legislature. Some countries may protect and enforce the rights of some or all of the claimants by taking over negotiations on their behalf, but others may only intervene when individual negotiations have failed. In any event, increasingly complex contracting invokes complex and costly legal constraints (12).

Shleifer and Summers (1988) suggest that due to the multitude of claimants, all contracts between the stakeholders of a firm are likely to be incomplete, because of the cost of complex contracting. However, rather than writing explicit contracts, the stakeholders opt for implicit contracts which are based on trust. These implicit contracts are not priced. This can lead to a situation where the bidder in a hostile take-over bid may be able to capitalise on this advantage by cancelling these implicit contracts with the firm's stakeholders (breach of trust). Shleifer and Summers argue that such a breach will only increase the bidder's welfare at the expense of other stakeholders but not create new wealth. If the company is not taken over but has to go into bankruptcy these implicit contract are automatically cancelled. The beneficiaries are now the claimants with explicit contracts since only these contracts are honoured under the

priority rule. Without the involvement of some outside authority, such as the bankruptcy courts, a portion of the claimants will be permanently disadvantaged.

Where there are large number of claimants, no efficient secondary market for assets and approaching bankruptcy the conflict of interest between various creditors becomes more pronounced. Bulow and Shoven (1978) show that this situation leads to an asymmetry in their negotiation and controlling ability, and results in a violation of the principle of value maximisation.

In bankruptcy, an optimal solution with regards to the management or disposal of assets by creditors is hindered by the existence of multiple and diverse claimants with a combination of explicit and implicit contracts. Firstly, the assets are not transferred from shareholder to bondholder (White (1988)) but are sold when the firm goes bankrupt. If claimants do not have explicit contracts then they may be disadvantaged.

Secondly, there are external constraints placed on some of the major claimants, in particular banks or other financial institutions. These organisations are restricted in the management of the assets of a bankrupt company by their own charter which in general does not allow active participation in the company affairs. Both the shareholders and the legal charters of these organisations will restrict the options available to some claimants when the debtor company is in bankruptcy, leading to a suboptimal solution.

Thirdly, a solution involving the take-over of the bankrupt firm, as put forward by Haugen and Senbet (1988), is only feasible when all claimants are in agreement, that is, no group can impose its own goal on the rest of the claimants (a situation called by Haugen and Senbet 'a free rider problem'). In practice, this does not often happen. The proposed take-over of AEG by the British GEC is

a case in point. The employees of AEG managed effectively to block such a proposal even though the financial creditors and shareholders were in agreement to sell (13).

Finally, in the case of large unanticipated losses, there is an incentive for the stronger creditors to 'blackmail' the firm into re-arranging the priorities prior to bankruptcy. Without resorting to an external authority, disputes arising from this are difficult to solve without legal intervention.

3.4.2.3 THE ROLE OF AGENTS AND UNANTICIPATED LOSSES

Managers of a firm can influence unanticipated losses in two ways. Firstly, they can act in their own self-interest by withholding information from the owners of the company (owner/agent conflict). Secondly, they may cause information to be distributed unevenly among creditors (agent/creditor conflict). Both conflicts may influence the timing of bankruptcy and therefore the size and distribution of the losses to creditors.

Jensen and Meckling (1976) were among the first to evaluate the agency cost arising from conflicting interests between owners and managers. They see the agency relationship as 'a contract under which one or more persons engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority' (14). Direct agency costs are paid by the owners of the firm in the form of a compensation package to the agents. The objective of this compensation package is to provide incentives for agents to maximise the value to the owners. Jensen and Meckling define the elements of agency cost as (1) the cost of measuring the agent's performance, (2) the cost of applying an index for the agent's compensation and, (3) the cost of devising and enforcing specific behavioural rules and policies for managers.

Barnea, Haugen and Senbet (1984) widen the scope of potential agency costs by including the conflict between agents and owners on the one hand and debt holders on the other. They identify agency problems in five areas: the type of ownership, risk incentive, investment incentive, bankruptcy costs and informational asymmetries. The five areas can be grouped into two types of potential conflicts. Firstly, there can be a potential conflict between the agent himself and his principal (owner/agent conflict), and secondly, the agent may be motivated to cause incomplete contracts between his principal and other claimants (creditor/agent conflict) (15). The latter assumes that the agent may withhold information from some claimants or follow an investment policy that benefits the owners but at the expense of other claimants of the company.

Saeng, Kim and Sorensen (1986) find evidence linking agency costs to the debt policy of the company. In perfect markets, agency costs of debt are priced by lowering the amount of available debt. The agency cost of debt is shifted back to the owners. By comparing the debt policies of companies to high inside ownership (i.e. owner/manager) to those with lower inside ownership they conclude that high debt ratios are strongly correlated to inside ownership. The conflict is reduced to a simple owner/debt holder dispute. With increasing use of non-owner agents, the debt ratio is shown to be considerable lower.

As the complexity of contracts between individual groups of claimants increases, so does the complexity of financial markets which trade in corporate equity and debt. Increasing complexity of markets may lead to less transparency on such matters as determining an adequate method of agents' incentive and supervision. The result is that the agent is faced with a decision problem referred to as moral hazard. In financial distress these

problems may occur in two forms. Firstly, agents may act in such a way as to maximise their own wealth at the expense of their employers if the incentive to agents by shareholders is insufficient. In such a case the agents may conceal the financial problems of a firm from the owners in order to prevent them from liquidating the firm. Secondly, agents may decide to withhold information from other claimants for the benefit of their employers if contracts are not adequately supervised. In this situation the agents may give incomplete information about the true financial state of the firm to creditors in order to delay bankruptcy. In both situations the welfare of one group of claimants is maximised at the expense of other claimants (16).

In conclusion, unanticipated losses to creditors originate largely from the inability to value distressed assets which in turn may be associated with the timing of bankruptcy. Timing is determined by the degree to which claimants and agents may influence the bankruptcy decision. Incomplete contracting and insufficient agency incentives can delay the bankruptcy decision, and affect the market value of the firm prior to bankruptcy. Financial markets cannot provide comprehensive solutions to problems arising from complex contracting and agency supervision, especially since secondary markets for assets cannot be assumed to function efficiently.

3.5 DISTRIBUTION OF LOSSES AMONG CREDITORS

Without any type of external regulatory force, unresolved disputes among the claimants including agents lead to lowering the welfare of some of the claimants. In most countries the role of the legislature has been expanded to solve the disputes between the claimants in such a fashion that some kind of market efficiency can be maintained. This is done by either forcing the participants to honour implicit contract agreements which are based on trust or,

where this is not feasible to spread the burden on all participants. Intervention is not costless and represents an additional burden to either the claimants or society. The question arises as to who should carry the losses and how much intervention is necessary (17).

The distribution of liquidated assets of a firm in bankruptcy is enforced by bankruptcy legislation. This is particularly important when the assets are insufficient to satisfy all the claims of the creditors.

In most countries transfer of control to individual creditors is restricted to specific assets. A possible exception is the UK, where control is assigned to the creditor (usually financial creditor) when bankruptcy takes on the form of receivership. Most bankruptcy legislation will allow a stay in the transfer if a reorganisation is seen to be in the best interest of all creditors.

Effectively, the laws protect the individual claimant of a firm from carrying losses assigned to other creditors. If the losses that cannot be allocated to the individual claimants on the basis of equality the laws will shift these to society as a whole. This occurs in Germany possibly more so than in most other countries.

Legal intervention in the market has often been criticised by finance theorists on the grounds that markets are sufficiently efficient and competitive (18). On the eve of the introduction of the new US bankruptcy legislation, Meckling (1977) argued that legal intervention in the market created additional costs which were ultimately borne by the borrower in the form of higher capital costs. Dye (1986), while admitting to some short term benefits of market intervention, similarly argues that such intervention will be costly in the long run.

Stiglitz (1981) rejects the argument that intervention in the market would lower the welfare of all participants. Empirical studies on the position of creditors in commercial insolvencies support his argument. Allan and Drobnig (1980), for example, maintain that a revision of the legal procedures in favour of more intervention is necessary to re-instate the principle of equality among creditors. In their study of secured and unsecured creditors involved in bankruptcy, they find that the market is unable to provide equitable distribution of debtors assets in the case of a short fall. They also argue that the legal framework of the last century is not empowered to ensure such distribution. 'The basis of insolvency procedures in all legal systems is the equality of creditors...(which) has been substantially replaced by one of inequality. Equality of creditors has been reduced to a secondary function, it merely ensures that the claims of all creditors in the same rank are satisfied pro rata' (19).
Efficient allocation through the legislature is safeguarded in three forms :

1. through company legislation which defines the company rights and obligations (20),

2. through bankruptcy legislation which ensures the even distribution in the event of bankruptcy and, in some countries aims to regulate the timing of bankruptcy, and

3. through social legislation which protects claimants which are in a weaker bargaining position such as employees and small creditors.

While some of the legislative costs can be allocated directly to the debtor (such as the administration charges), others must be borne by the society as a whole and represent a social cost (21). Arguments supporting the increasing role of the legislature can be

found by Shuchman (1977) and Trost (1973). According to Trost (1973) one of the prime reasons for the new legislation is to prevent major creditors from gaining an unfair advantage.

Bebchuck (1988) argues that legal intervention prior to bankruptcy may enable the company to reorganise rather than liquidate. Supervising the reorganisation of an insolvent firm may leave claimants better off due to the fact that the going concern value in reorganisation is frequently higher than its forced liquidation value. Similar arguments have been put forward by Franks and Torous (1991).

Though the degree of legal intervention designed to restore equilibrium among the market participants differs in various Western countries, the objective of the legislation is similar. Its prime concern is to provide an equitable solution to the dispute between claimants in a multi-party firm given unanticipated losses. The position of these claimants in case of dispute often is determined by the law. For groups such as employees the law determines their preferred status, even though there is no specific contract with the equity holder which stipulates this.

In principle, there are two extreme approaches in the bankruptcy laws, one which defines the parameters of contracting without intervention and another which intervenes directly. While the laws of the last century favoured the 'laissez faire' approach, modern legislation tends to intervene directly. The increasing complexity of contracting and the existence of incomplete contracts have been the justification for the new legal frameworks.

There are national differences in ways of dealing with the cost allocation due to imperfect markets. In the UK, the new bankruptcy law may prevent some creditors from forcing liquidation until the viability of the company has been decided (22). While the debtor

is in default, the creditor is unable to recoup his outstanding claim immediately. The additional cost imposed by this delay is therefore carried by all creditors equally. When the company is found to be unable to continue operations, safeguards for certain groups come into play. The cost of these safeguards become a cost to the taxpayer. These costs may accrue in three ways.

a. The employees of the company may get full or partial compensation for the amount owed to them.

b. The outstanding amounts to the Revenue Commissioner or similar agencies are compensated in full by society.

c. Small suppliers and creditors who may have incurred substantial losses get funding under a government emergency scheme.

The law in Germany tries to eliminate agency costs through specific legal requirements imposed on the firms' managers and shifts the cost of imperfect markets first to all claimants and, if that fails, to society as a whole. For example, to avoid the cost of informational asymmetries which may benefit the financial creditor, the law requires that the company must inform all claimants when the book value of the share capital falls below its par value. Filing for bankruptcy is required when the net worth of the company is zero. The procedure is designed to ensure that timely bankruptcy occurs even though the company may not be insolvent at the time of filing. All bankruptcy procedures have to go through the court system. Since this is costly and time consuming, there is some incentive for the financial creditor to come to an arrangement with other claimants prior to filing. When the company files for bankruptcy, compensation arrangements like the ones described for the UK come into effect. These costs are borne by society. Because the compensation amounts tend to be higher in Germany than in the

UK, the social cost is equally higher.

In both the UK and Germany the financial creditor is restrained by the law in two ways: (a) some of his activities prior to a debtor filing for bankruptcy may be curtailed (23), and (b) he is closely supervised in his lending activities by the prevailing credit laws (24). This impairs his ability to shift his portion of the bankruptcy cost to other claimants. Nevertheless, financial creditors have been accused of being placed in a more advantageous position when their debtor goes bankrupt due to their close liaison with the debtor firm (25).

The impact of legal intervention on the distribution of losses to creditors and other claimants may affect the frequency of filing. As will be shown in Chapter 4, there is a higher frequency of bankruptcy for small firms than for larger ones. Since the number of claimants is related to the size of the firm, it can be assumed that contracts in a small firm may be more complete and efficient than in large firms. In large firms the contracts are complex and it is difficult to ensure that they are complete and efficient. As shown previously, incomplete contracts are likely to lead to large losses. Large bankruptcies must therefore be disproportionately more costly to society than small bankruptcies. To avoid these costs governments may make a greater effort to rescue these firms.

3.5 SUMMARY

This chapter has looked at the economic debate on bankruptcy costs, including losses suffered by creditors in bankruptcy. Bankruptcy costs are likely to increase with inefficiencies in the secondary market of assets, and with the number of claimants. The main problem in a multi-claimant situation arises from the inability of the firm to write complete contracts with all parties, and to

eliminate agency costs. The result is delay in the timing of bankruptcy, and correspondingly larger unanticipated losses to creditors.

It is impossible to distinguish between anticipated and unanticipated losses. This thesis will therefore look at the total loss of asset values to creditors through bankruptcy, and assess the likelihood that some or all of these might have been anticipated.

The distribution of losses is heavily influenced by bankruptcy legislation. One of the most lenient approaches is taken by the UK, which supports a direct bargaining approach. The German legislature intervenes directly, by stipulating that all bargaining in bankruptcy must occur under its supervision and with the approval of the courts. There is a large literature discussing whether a laissez-faire or interventionist approach distributes losses across creditors more efficiently. The contrasting UK and German approaches will be illustrated in the next chapters.

NOTES :

(1) see in particular Warner (1977), Altman (1984). Others such as Franks and Torous (1988 and 1991) provide indirect evidence of the relevance of bankruptcy costs by discussing between claimants given the existence of complex contracting and imperfect information.

(2) Titman (1984) distinguishes between a 'net liquidation value' which is net of all additional costs imposed on non-creditors and a 'gross liquidation value' which includes costs arising out of other imperfections such as moral hazard and agency costs. These costs will be discussed later in the chapter. Titman calls the former a 'benevolent liquidation policy' which maximises shareholders' wealth while the latter is called a 'selfish liquidation policy'.

(3) For a further discussion on the term bankruptcy see : Meckling (1977), Hax (1985) and White (1988). Aghion and Bolton (1988) refer to bankruptcy as the mechanism for transferring ownership from shareholders to creditors. This is in practice only applicable if creditors are one homogeneous group such as exist in the two-party model. Furthermore, legal constraints in some countries such as Germany will not allow all creditors to physically take over the assets when the debtor company has been declared bankrupt.

(4) See Shuchman (1977) p.73.

(5) One feasible interpretation of this may be that the individual shareholder has not the financial capacity to acquire information sufficiently to protect himself against adverse shareprice movements of his investment. (see : the London Stock Exchange Fact Sheet 1988).

(6) For a further discussion on Penn Central see Brealey and Myers (1981) p.388. For the Chrysler Corporation crisis see Iacocca (1984).

(7) See Webb (1988), p.283

(8) An extensive survey of the empirical literature is presented by Scherr (1988).

(9) See Barnea, Haugen and Senbet (1984) p.1.

(10) Haugen and Senbet (1988) p.37.

(11) See Altman (1984) p.1071.

(12) To find an example of the actual number of claimants in one medium sized firm, one should look at the case of Rotaprint which is discussed in Chapter 7. At the time of insolvency, there were a total of 656 trade creditors and 116 expense creditors apart from shareholders, bondholders and banks.

(13) The case is discussed in Chapter 6.

(14) See Jensen and Meckling (1976) p.308.

(15) That can also include the conflict between the new shareholders and the old ones in the case of a share issue.

(16) For further discussions on the problem of moral hazard see : Barnea, Haugen and Senbet (1984) and Rees (1987).

(17) Costly information cannot be arbitraged away. See Grossmann and Stiglitz (1976), (1980b).

(18) There have been numerous studies made to test the informational efficiency of the stock market. Most notably are the studies by Fama, Fisher, Jensen and Roll (1969) and Fama (1970).

(19) See Trost (1973) p.620.

(20) This includes the filing of relevant information by limited liability companies.

(21) The actual cost allocation differs from country to country. For example, the loss of employee pension claims in German when the firm goes bankrupt is covered by the pension insurance fund to which all firms contribute.

(22) For further discussion see Webb (1988).

(23) For example, the activities of the German Housebanks which participate in the issue of equity or the purchase and sale of equity. If the bank has knowledge of the financial difficulties of the firm, then the bank must disclose this fact to the prospective buyers of the firm.

(24) Type and cost of credit in Germany are regulated by the credit laws and supervised by the Bundesbank. Any changes in the credit rating must be communicated to a central institution which distributes the information further.

(25) This will be discussed in the later chapters and particularly in the case studies.

SECTION II DOCUMENTARY EVIDENCE

CHAPTER 4 BANKRUPTCY IN THE UK AND WEST GERMANY, A STATISTICAL OVERVIEW

4.0 INTRODUCTION

In this chapter we will provide statistical evidence on the numbers and sizes of bankruptcies in the UK and Germany. The figures suggest that losses suffered by creditors in bankruptcy are large in both countries.

Before presenting comparative statistics, we will define the reporting procedures adopted by each country's statistics office. In addition to the official bankruptcy statistics, details relating to incorporation and finance need to be discussed, to provide a more thorough understanding of the relevance of the bankruptcy figures within each country. Finally, the differences between each country's bankruptcy statistics are analysed. The outline of the chapter is as follows :

1. **Reporting procedures and requirements of bankruptcy statistics in the UK and Germany**

2. **Past and present bankruptcy trends in the UK and Germany**
In particular, details of Receiving Orders in relation to industry sectors and company size will be discussed. The size of the monetary loss to creditors and to the economy as a whole is shown for Germany.

3. **Commercial enterprises: categories, numbers, size and turnover (income) in the UK and Germany**
Bankruptcy statistics refer to the actual number of companies. These statistics must be related to the overall number of registered companies in each country, type of incorporation and average company size.

4. **Type and source of company finance in the UK and Germany**

For Germany these figures are given on the basis of incorporation. The aim is to establish the types of creditors and shareholders who could be affected by the company's bankruptcy. This information provides a starting point for further discussion of bankruptcy related problems such as optimal liquidity policy and economic costs.

5. Analysis and Summary

A direct statistical comparison between the UK and Germany is difficult. Two main difficulties arise. One is that statistical methods and classifications are different. The other is that, as shown in chapter 2, differences in legal and economic systems have given rise to differences in the type of incorporation and financing in the UK and Germany.

Other factors which influence the validity of such comparison are the use of credit and the composition of company finance. Credit figures depend largely on the capital markets and are subject to influences of diverse government economic policies. Comparing company finance statistics internationally is also very problematic. Companies located in countries with active stock exchanges tend to have a larger equity structure than those where the stock exchanges only play a limited role for raising capital. In some countries such as Germany banks are instrumental in the equity brokerage market as well as providing short term and long term debt capital. In many European countries debt holders and equity holders of a company's capital may be one and the same institution. In other countries such as in the UK and the US legislation has prohibited the licensed banks from being active in the equity and long term debt markets, though some changes in the law have recently allowed the UK banks to engage in these activities.

Another integral part of such international company evaluation lies in the comparison of the different legislation governing incorporation and management. Company incorporation provides the rationale for the chosen type of finance while the legal restrictions imposed on management in different countries determine the system of company control. German law, for example, provides for the establishment of works councils which in larger companies elect 50% of the seats on the board of directors, frequently called the 'supervisory board'. As such, these councils have access to and participate in all management decisions. This gives them a significant share of control in management affairs. The role of the German works council in bankruptcy will be further discussed in chapter 5 under legal and credit controls.

4.1 STATISTICAL COMPARISON

In the UK the insolvency and bankruptcy statistics originate in the insolvency courts for compulsory orders and in Companies House for voluntary insolvencies. These are summarised by the Central Statistical Office in the Annual Abstract of Statistics and are published monthly by the Department of Trade and Industry in their magazine, British Business, with a summary the end of each quarter. The DTI also publishes an Annual Report on Bankruptcy and an Annual Company Report.

In Germany, all bankruptcies and insolvencies are reported by the insolvency courts. The Central Statistical Office in Wiesbaden is then responsible for the publication of insolvency statistics. The figures appear twice a year in the publication, Wirtschaft und Statistik in March and July, and are analysed in an article in these issues. Details about the financial outcomes of bankruptcy proceedings are given annually in the July publication dealing with company statistics. A summary is provided in the annual

publication, Statistisches Jahrbuch.

The official statistics in the UK distinguish between bankruptcy and insolvency. Bankruptcy statistics deal with the failure of small businesses and individuals. Insolvency statistics describe the failure of limited liability companies.

The German company bankruptcy statistics do not take into consideration the limited liability status but focus on the tax status when classifying on the basis of company and individual bankruptcy (1).

4.1.1 REPORTING PROCEDURES IN THE UK

The official statistics in the UK differentiate between three geographical areas, England/Wales, Scotland and Northern Ireland, each of which operate under different legal insolvency procedures. For practical, purposes the official statistics of England and Wales are used here. The total Scottish insolvencies over the past 5 years averaged less than 4% of the insolvencies of England and Wales. The figures for Northern Ireland are even lower than this (2).

4.1.1.1 COMPANY INSOLVENCY

In the UK, reporting for company insolvency falls into two categories, creditors' voluntary liquidations and compulsory winding up orders. A third category frequently listed is the members' voluntary liquidations. Only compulsory winding up orders are reported to and dealt with by the insolvency courts.

In the case of creditors' voluntary liquidations, the Companies House in Cardiff is officially notified by the creditors' receiver through a registration procedure. No further official involvement is required and creditors and debtors come to a voluntary arrangement usually under stewardship of a receiver appointed by the creditors regarding settlement of debts. In some cases directors have undertaken personal guarantees to the creditors. In these instances the creditors can then turn to the pledged assets of the company directors if the assets of the company cannot satisfy all the outstanding claims. Directors' insolvencies are then reported by the bankruptcy court under the category of individual failures. This leads to some statistical double counting when adding company insolvency figures to individual bankruptcies. On the other hand, direct arrangements between company directors and creditors without the assistance of a receiver are not included in any statistics.

Changes in the Insolvency Act 1986 include the provision of an administration order against the company which prevents an immediate winding up of the company. The affairs are managed by a court appointed administrator during the time of the administration order. These changes are too recent yet to have made a statistical impact (3).

4.1.1.2 INDIVIDUAL BANKRUPTCIES

The category of individual bankruptcy includes individuals as well as small businesses, usually trading in the form of partnerships or individual traders. In the bankruptcy statistics, small business bankruptcies account for 74% of all individual bankruptcies. Under the 1914 Bankruptcy Act, creditors petition for a Receiving Order in the High Courts of Justice or the County Courts against individuals and partnerships. Liabilities of deceased persons are

dealt with separately under an Adminstration Order. The statistics for individual bankruptcies shown in Table 4-1 include both Receiving Orders and Orders for Adminstration. The latter, a total number of 10 in 1986, are relatively insignificant compared to the 2024 similar cases administered in Germany in that year. One explanation for the large discrepancy between the two figures may be the difference in reporting requirements. Many of the cases relating to estate bankruptcies are not reported to the courts in the UK while in Germany these cases must be filed with the courts.

Individual bankruptcy statistics presented are the net total of cases administered. Thus, not all petitioned cases are included. A small amount of cases are consolidated before being proceeded with. Others are rescinded frequently for two reasons : the debtor has come to an arrangement with his creditors or the costs of proceeding associated with the claims are not likely to be recovered. That is, the debtor is unlikely to be able to apply for an official discharge in the future. Since the courts get involved in all individual bankruptcy applications more details for this category are available and are therefore published. Liabilities and assets of debtors are accumulated and published in the Annual Bankruptcy Report. The statistics do not distinguish between secured and unsecured creditors. This leads to distortions in respect of assessing the claim settlements of the creditors and to problems in the comparison of the UK statistics with the German ones.

Following the new Insolvency Act 1986, reporting procedures on bankruptcy and insolvency were changed starting in 1988. The Department of Trade and Industry in their Annual Report on Bankruptcy 1987, announced that future reports will deal with both sections of insolvency under the new Act. Future comparisons between the UK and Germany should be greatly improved due to the new procedures on reporting.

4.1.2 REPORTING PROCEDURES IN GERMANY

4.1.2.1 COMPANY INSOLVENCIES

In Germany, any business that fails and has to seek the assistance of the court is statistically classified as a company bankruptcy. While there is a difference between company and individual bankruptcy, the difference relates to the official obligation of filing rather than to the type of incorporation. For a company, there are two instances which require filing for bankruptcy, illiquidity and over-indebtedness. The first case is similar to the system in the UK in that the creditors of the company petition the court. In the case of over-indebtedness the company directors must file when the operating loss is larger that the net worth of a company (4). Alternatively, a company can petition in the bankruptcy court for the purpose of reorganisation (Vergleich). The courts decide whether the company has the potential to survive. These cases are not dealt with here since there are no detailed statistics for the British comparable 'voluntary arrangements' available.

Once a bankruptcy petition is received, the court appoints an official receiver who decides whether there are sufficient funds to proceed with the application. In recent years only one in five bankruptcy applications were proceeded with. This represents a significant reversal of the figures in the 1950's, where only one in five applications were rejected for further proceedings.

Independent of whether the court accepts an application, the statistical reporting requirements are similar. The company has to submit documentation to the courts relating to its assets and liabilities which are then accumulated by the individual courts and reported to the Central Statistical Office (Statistisches Bundesamt) in Wiesbaden. For the cases where assets are found to

be sufficient for further proceedings, the reports include additional information regarding distribution of liabilities on the basis of size, trade and the net settlement of claims of preferred and unsecured creditors - the coverage ratio. Data for secured creditors - those who hold a lien against a specific asset - are not included in the statistics since they are not included in the official reports.

4.1.2.2 INDIVIDUAL INSOLVENCIES

The relatively high number of individual failures in Germany in comparison to the UK figures can be attributed in some degree to statistical differences. In 1986, 5342 individuals filed for bankruptcy. Of this 3257 were actual individuals, 2024 resulted from bankruptcy of deceased persons' estates and the remaining 61 fall into diverse categories such as charities or non-profit organisations. (Details of the statistics are shown in Table 4-1.) In many cases the individual insolvencies were directly related to preceding company failures so that some of the individual failure would also be accounted for in the company failure. No details for this double counting are available (5).

4.2 BANKRUPTCY STATISTICS

4.2.1 BANKRUPTCY TRENDS IN THE UK AND GERMANY

As shown in Table 4-1, the last ten years have seen a large upsurge in individual and company insolvencies in both countries. In the UK the total number of cases rose from 10,316 in 1977 to a record high of 21,890 in 1984. Since 1984 there is a marked reduction in insolvency cases, particularly in the category of company insolvency. Between 1986 and 1987, the total amount of company

failures in the UK fell by 19%. This was a reduction for the third year in succession, though the total number is still more than double the figure of 1979. A portion of this large decrease in recent bankruptcies is at least to some extent associated with different statistical accounting methods, since the new insolvency act came into force in December 1986.

Individual bankruptcy cases in England rose at a lesser overall rate between 1977 and 1987 than company bankruptcies. At present there is no evidence of a reduction in individual bankruptcy cases while company data suggest that at least this category enjoys the benefit of the 1985/88 economic upturn.

TABLE 4-1 NUMBER OF INSOLVENCIES IN ENGLAND AND GERMANY 1977 - 1987

	1. England and Wales			2. Germany		
	Total	Individual	Company	Total (Note 1)	Individual	Company
1977	10316	4485	5831	9562	2633	6929
1978	8982	3896	5086	8722	2773	5949
1979	7982	3445	4537	8319	2836	5483
1980	10865	3975	6890	9140	2825	6315
1981	13660	5064	8596	11653	3159	8494
1982	17707	5640	12067	15876	3961	11915
1983	20370	6964	13406	16114	4380	11734
1984	21890	8169	13721	16760	4800	11960
1985	21614	6716	14898	18876	5251	13625
1986	21486	7081	14405	18842	5342	13500
1987	18691	7509	11182	17589	5491	12098

Note 1 : Receiving Orders Only

Source: CSO Financial Abstract and Statistisches Jahrbuch 1978/1987

German statistics suggest a similar trend. While individual bankruptcies have risen steadily, company figures show a marked downward trend in those three years.

The difficulty in the direct comparison of the statistics of the two countries lies in the different definitions of company and individuals. While company bankruptcy in England is confined mainly to limited liability companies registered under the Companies Act and excludes individual traders and partnerships, German statistics include all forms of registered companies (6). This means that a large portion of bankruptcies classified as individuals in the UK are classified as companies in the German statistics.

The Annual Report on Bankruptcies of the Department of Trade and Industry breaks down the bankruptcies of individuals on the basis of trade. From these statistics it becomes apparent that in general only about 26% of the individual bankrupts can be classified as individuals in the strict sense of the word (see Table 4-2). The remaining 74% of bankruptcy cases are small traders or partnerships. To make the UK statistics comparable with the German ones the figures for UK company insolvency of Table 4-1 in 1987 would need to be increased by about 74% of the individual bankruptcy cases , or 5600. This results in a total company insolvency figure for the UK in 1987 almost 16,800 compared to about 12,100 in Germany. For 1986 the increase would amount to 5,200 resulting in the bankruptcy of just over 19,600 UK companies (7).

Though individuals make up only 26% of the total number of bankruptcies they account for one half of the liabilities and assets. The reason given for this discrepancy by the DTI is that the directors and promoters of companies' have undertaken personal liability for the losses incurred by the companies they own. This category holds more than 80% of the liabilities and assets of the total individual group. Strictly speaking, this group is already accounted for in the company statistics of insolvency.

TABLE 4-2 FAILURE BY TRADE IN ENGLAND AND WALES 1986

(Receiving Orders Of Companies Not Registered As Limited Liability Or As Individuals)

Classification	No.	Liabilities in %	Liabilities in £m	in %	Coverage(*) in %
Manufacturing	273	5.51%	11676	5.25%	19.58%
Construction	800	16.14%	26254	11.81%	34.60%
Trade/Retail	1951	39.37%	84304	37.91%	20.44%
Service	691	13.94%	48954	22.01%	27.32%
Other	1241	25.04%	51211	23.03%	23.39%
Total Company	4956	100.00%	222398	100.00%	24.26%
Company	4956	73.97%	222398	49.24%	24.26%
Individuals	1744	26.03%	229247	50.76%	15.69%
Grand Total	6700	100.00%	451647	100.00%	

(*) Debt over available assets

Note : the reclassification of trade based on the classification given by the Department of Trade and Industry enables the direct comparison with German figures.

Source: Annual Report on Bankruptcy 1987, DTI p. 10

In respect of the German statistics on individual bankruptcies, only 60% of the total figure can be directly attributed to personal failure. The remaining bankruptcies are caused by inheritances where the heir refuses to accept the losses (and assets) of the deceased (8). Adjusting the UK statistics for individual bankruptcies by subtracting from them the 5600 (for 1986 : 5200) cases which can be classified as businesses and subtracting from the German statistics the 2200 (for 1986 : 2100) bankruptcy cases (or 40% of total) due to inheritance defaults the comparative figures for individual bankruptcy in 1987 and 1986 for both countries would be as follows:

	1987	1986
UK	1,900 cases	1,800 cases
Germany	3,300 cases	3,200 cases

On the basis of the adjustments, the total number of business defaults in Germany are 25% less than those in the UK while the number of individual bankruptcies are almost 75% higher. The reporting requirements for unlimited liability companies in the UK are similar to those in Germany and the figures can, with some adjustments, be made comparable. The question is whether the same holds true for the purely individual bankruptcy statistics. It is quite probable that a large number of individual failures are simply not reported since the creditors are not likely to recover any of their debts. The unreported number of individual failures in either country is impossible to estimate so that the actual bankruptcy figures of individuals in both countries need to be viewed with some caution.

UK insolvency statistics on the basis of industry classification and size are not available apart from the statistics in Table 4-2 relating to individuals and small businesses only. No official details for the UK in respect to company bankruptcy according to industry category, age or estimated liabilities are recorded.

In Germany of the total 12058 companies that failed in 1987 the largest fraction came from the service industry (29% of total) though the trade sector (26%) followed closely behind as shown in Table 4-3 (n.b. these statistics are slightly different from Table 4-1 due to adjustments of the Statistics Office). The UK sector trade/ retail in the individual bankruptcy statistics shows the highest bankruptcy incidence both in terms of actual numbers and amounts of liabilities. Service industry failures make up 14% while the construction industry shows a rate of 16%. The manufacturing sector has the lowest frequency of failure but because of the higher capital intensity and the corresponding higher turnover of that industry sector, the liabilities of this sector are the

TABLE 4-3	COMPANY FAILURE BY TRADE IN GERMANY 1987			
	No.	in %	Liabilities (in DM m)	in %
Manufacturing	2054	17.03%	3425	33.87%
Construction	2631	21.82%	1549	15.32%
Trade	3100	25.71%	1849	18.28%
Service	3487	28.92%	2960	29.27%
Other	786	6.52%	330	3.26%
Total Company	12058	100.00%	10113	100.00%
Individuals	5485		1205	

Source: Wirtschaft und Statistik, 3/1988, p.193 Table 2

highest.

4.2.2 FAILURE BY SIZE AND AGE

Almost one-half of all failures in Germany in 1987 had liabilities of less than DM 100,000 with the debtors of less than DM 50,000 making up the vast majority. Less than 1% of all insolvent companies/individuals owed more than DM 10 million. The total liabilities of all reported insolvencies in Germany in 1987 amounted to more than 11 billion marks, a slight reduction from the 1986 figures. Table 4-4 shows the frequency of bankruptcy decreasing with size.

Most insolvencies occur in the first eight years of the company's life. Of the total insolvencies in 1987 almost three-quarter were less than eight years old (Table 4-5). However, with regard to the amount of liabilities outstanding, the statistics are somewhat reversed. Insolvent companies older than 8 years have more

TABLE 4-4 FAILURE BY SIZE IN GERMANY 1987

(Individual and Company Insolvencies)

LIABILITIES (in DM)	No	%
UNDER 50000	5785	35.62%
50-100,000	1902	11.71%
100-500,000	4955	30.51%
500-1 MILL	1657	10.20%
1 MILL-10 MILL	1792	11.03%
10 MILL +	149	0.92%
WITH DATA	16240	
WITHOUT DATA	1303	
Total	17543	

Source : Wirtschaft und Statistik 3/1988 p.193

liabilities than those less than 8 years old. The financial loss to creditors is greater when the insolvent company grows older. This can probably be explained by the fact that established companies tend to have easier access to credit than young companies.

TABLE 4-5 COMPANY FAILURE BY AGE IN GERMANY 1987

	Number	in %	Liabilities (in Mill.DM)	in %
Under 8 years	8964	74.34%	4562	45.11%
Over 8 years	3094	25.66%	5551	54.89%

Source: Wirtschaft und Statistik, 3/1988, p.193 Table 2

4.2.3 COVERAGE RATIO AND THE COST OF FAILURE

4.2.3.1 GERMANY

The official receiver will proceed with the distribution of assets of a bankrupt company if the bankruptcy court has determined that the cost of proceedings can be covered by the remaining assets. Of the total of 17,543 application for bankruptcy (company and individual) in 1987, only 20 percent (3800) were judged to have sufficient assets to cover the administrative cost of legal distribution and accepted by the German official receiver for further processing. After proceedings were opened a further 5 percent of the accepted cases were found to have insufficient funds to continue with the official receivership. In 85 percent of all bankruptcy cases no assets were available for distribution to preferred and unsecured creditors. This leads to the suspicion that certain creditors were able to secure their claims prior to the companies' filing for bankruptcy. Only creditors with prior knowledge of the companies' state of affairs would be able to secure assets. This suspicion, which is shared by many others, led to an inquiry into the nature of asset security by creditors instigated by the German Department of Justice (9). In comparison, in 1950 more than 75 percent of all bankruptcy applications were judged to have sufficient funds to cover the court costs and were accepted by the official receiver in Germany.

In Germany three classes of creditors are recognised under the old insolvency laws (Konkursordnung of 1914), the unsecured creditors, the preferred creditors and the secured creditors. In terms of ranking, the secured creditor receives the property or its value prior to any other creditor. If the sale of this property does not satisfy his claim he becomes an ordinary unsecured creditor. Preferred creditors receive priority in their claims before unsecured creditors. In the case of those bankruptcies accepted by

TABLE 4-6a FINANCIAL RESULTS OF BANKRUPTCY

	Receiving Orders	Liabilities (in mil. DM)	Losses	Coverage(*) Ratio
1978	1937	3233	2987	7.6%
1979	1923	3962	3649	7.9%
1980	2122	3454	3119	9.7%
1981	2523	5075	4741	6.6%
1982	3416	8577	7731	9.7%
1983	3214	8156	7246	11.2%
1984	3259	7587	7026	7.4%
1985	3653	9025	8131	9.9%

(*) Preferred and Unsecured Claims only

the official receiver only 6.2 percent of all unsecured claims could be satisfied in 1985 as emerges from Table 4-6. On the whole, only 28% of the claims of preferred creditors i.e. those whose security were not in form of a title of lien, could be paid out. Even the secured creditors were not able to recover all of their outstanding claims though they were no doubt better off than the preferred and unsecured creditors (10).

TABLE 4-6b NET COVERAGE OF CLAIMS

(in percent)

	Preferred	Unsecured
1970	43.5	4.5
1975	32.7	2.3
1980	32.1	5.8
1981	32.8	3.4
1982	25.1	5.1
1983	21.8	4.6
1984	25.7	2.8
1985	28.1	6.2

Source: Bevoelkerungsstruktur und Wirtschaft der Bundeslaender 1987, Stat. Bundesamt, Wiesbaden p. 78-80

The coverage ratio of claims differ significantly between a limited liability company (for example the GmbH) and an unlimited liability organisation (under the category of Personengesellschaft). While preferred creditors of a limited liability company only received 25% of their claims his counterpart for unlimited liability companies was able to receive 29%. The difference for unsecured creditors is even wider. For the limited liability company the unsecured creditor obtained a coverage of only 2% whereas he was able to secure 15% in the unlimited liability company.

A comparison of the increases of Receiving Orders and total monetary losses to preferred and unsecured creditors since 1978 yields some interesting results. From 1978 to 1985 Receiving Orders increased at a rate of approximately 9.5% per annum. Losses to creditors rose at a rate of about 17% per annum during the same period. According to OECD statistics the average annual GNP deflator for Germany during this period was less than 4%. Both Receiving Orders and even more so, absolute losses rose disproportionately more than the rate of inflation.

In its commentary on the insolvency statistics (in Wirtschaft und Statistik 7/1987) the Statistische Bundesamt estimates that the loss to the economy for 1985 totalled 15 billion marks. Of this sum, about one-third is the loss accrued from defaults which did not use the services of the official receiver. These figures are said to be a low estimate since the losses of many insolvencies are frequently written off by creditors without being reported to the authorities. In its Annual Report in 1987, Creditreform, the leading German credit information agency, estimated the loss to the economy in 1986 to be 25 billion marks. Creditreform claims that the number of unemployed attributed to company bankruptcy in 1986 rose by 155,000. Their breakdown of cost is shown in Table 4-7.

TABLE 4-7 TOTAL LOSSES THROUGH BANKRUPTCY IN GERMANY 1986

(in billion DM)

Creditors' Losses as reported	12.0
Conditional Bankruptcies	7.0
Social Insurance Losses	2.7
Tax Losses	2.6
Destruction of Net Worth	.7
Total Losses	25.0

Source: Creditreform Jahresbericht 1987

Compared with the German Gross Domestic Product of DM 1614 billion this figure represents a loss of more than 1.5% of GDP, or about 60% of that years economic growth rate of just over 2.5%. With such a magnitude, the question of just distribution of cost takes on a new dimension and has major implications on capital cost.

TABLE 4-8 BANKRUPTCY 1977-1986 ENGLAND

	No. of Receiving and Admin. Orders	Liabilities as estim. by debtors (in £000)	Losses as estim. by debtors (in £000)	Net Coverage in %
1977	4095	105,459	89,303	15
1978	3540	206,236	185,997	10
1979	3170	66,355	44,455	33
1980	3652	69,117	29,560	57
1981	4744	170,227	130,565	23
1982	5319	211,034	176,392	16
1983	6576	227,067	172,678	24
1984	7726	558,932	455,274	19
1985	6358	337,481	253,308	25
1986	6700	451,647	367,724	20

Source: Annual Report on Bankruptcy 1987, DTI, Table 1

4.2.3.2 UK

There is no requirement for British courts to report on the size of company creditors claims though some statistics are available relating to personal bankruptcy and the cost of insolvency administration. Table 4-8 shows that in 1986 6700 individuals and small companies failed with an estimated liability of about £450,000,000. The liabilities per individual amounted to £67,300. Comparing this with figures for Germany and adjusting for the exchange rate the results are remarkably similar. In 1986 in Germany, 5337 individuals filed for bankruptcy with an estimated debt of DM 1,143,000 which translates into a debt of DM 214,000 per debtor. At an exchange rate of DM 3.10 per £ the Sterling value of the typical German debtor would amount to about £69,000.

The total losses fluctuated strongly over 10 year period from a relatively small amount in 1980 to over ten times that in 1984. On the whole there is a strong upward trend in the amount of bankruptcy losses to creditors as is shown in the German figures. The losses for the first five year period between 1977 and 1981 averaged just under £100 million. The losses for the following five years showed an average of almost £300 million with a more consistent increase over the last five year period.

The total coverage ratio of the individual British debtor also fluctuated greatly over the last 10 years. No break down is given for the three categories of creditors. While a total of 25% of all claims outstanding could be satisfied in the UK in 1985, for the 796 individual cases accepted (out of the total of 5251 registered) by the court in Germany less than 4% of the debt could be settled out of the available assets (11).

The German figures incorporate preferred and unsecured creditors but not secured creditors. The UK statistics count all assets

irrespective of priority claims. Secured and unsecured status of creditors in the UK determines the actual coverage ratio of both groups. The status most comparable with the 'preferred' creditor in Germany is probably that of a creditor holding a floating lien over the debtors' assets.

In general, one can conclude that losses to creditors (and of course shareholders) resulting from bankruptcy proceedings of the debtor company have increased in the last 10 years disproportionately to the number of bankruptcies. In the UK the increases in loss to creditors appear to be less than in Germany, particularly if one adjusts the figures with the higher British deflator over the comparable time period. Both rates - the increase in monetary losses and the increase in actual number of bankruptcies - lie far above the actual inflation rate in both countries.

4.3 INCORPORATION, COMPANY STRUCTURE AND BANKRUPTCY

Company insolvencies represent by far the largest share of the total failure statistics both in the UK and in Germany. The loss to creditors and other parties involved depends on the status of the company regarding limited liability. Limited liability protects the individual owner of a company from becoming destitute as a result of the business failure. There are some significant differences in the British and German forms of incorporation which require further analysis in order to get a comparable picture of the both countries.

TABLE 4-9 COMPANY REGISTRATION IN THE UK

	No. of Legal Units	VAT Registration	No. of Registered Limited Liability Companies		
			Total	Private	Public
1982	1,446,973	1,356,000	807,817	804,636	3,181
1983	1,473,873	1,390,000	855,710	852,331	3,379
1984	1,496,957	1,419,000	894,924	891,212	3,712
1985	1,513,922	1,439,000	868,056	863,794	4,262
1986	1,533,156	1,468,000	902,273	897,175	5,098

Legal Units by VAT registration and voluntary registration if below VAT limits.

Source: Business Monitor Series PA1003, 1987, P. 13, HSMO
VAT Registration : British Business, 31 July 1987,
Company Registration : 'Companies in 1986-87, Department of Trade and Industry.

4.3.1 COMPANIES IN THE UK AND GERMANY

Registrations of company status distinguish between private and public companies where both types are of limited liability status. At the end of 1986 more than 1 million companies were registered in Companies' House, an increase of more than 11 % from 1982. Of the total registered companies, less than 1% were classified as publicly limited as shown in Table 4-9, Companies' Registration in the UK.

The number of legal units in the UK at end of 1986 stood at more than 1.5 million, of which more than 95% were registered for VAT. Three quarters of all businesses earned less than £500,000 but the largest companies making up a little more than 1% of total numbers turned over more than the remaining 99% (Table 4-10). VAT registered businesses increased at a higher rate than company registrations between 1982 and 1986. About 60% of all businesses in the UK are in the form of limited liability.

TABLE 4-10 TURNOVER IN SIZE BANDS

(in 000)	No.	in £
20-50	510,509	7,657,635
51-100	297,313	7,284,169
101-250	262,446	19,552,227
251-500	108,275	13,480,238
501-1000	62,370	15,561,315
1001-2000	35,061	17,512,970
2001-5000	24,426	36,626,787
5001-10000	8,844	22,105,578
over 10000	10,551	105,510,000

Source: Business Monitor Series PA 1003, 1987, P. 13, HSMO

In Germany, there are 7 different forms of company registration, 5 of which classify as unlimited liability company forms and are categorised usually under the common term Personengesellschaft. (Table 4-11 UK Equivalents of German Company Classifications). In 1987, there were more than 2 million registered companies, roughly comparable with VAT registrations, 36% more than in the UK (Table 4-12). Over 84% of the total registered companies in Germany were classified as individual traders. Only 10% namely the forms 'Gesellschaft mit beschraenkter Haftung'(GmbH) and 'Aktiengesellschaft' (AG), are limited liability companies with the requirement of publication of accounts. Of the two forms of limited liability only the Aktiengesellschaft (AG) may qualify for access to the stock exchanges. Less than 2800 companies are registered as Aktiengesellschaft and of these only about 600 are traded on the Exchanges (12).

Set against total company registrations, it appears that the rate of company failure in the UK is higher than in Germany. Part of the reason for this may be found in the relative ease of registering in the UK but also in the less structured approach to business formation. While the paid-up share capital requirement for limited liability in the U.K. is initially minimal and only determined by

TABLE 4-11 UK EQUIVALENTS OF GERMAN COMPANY CLASSIFICATIONS

1. **Unlimited Liability Companies (Personengesellschaft) :**

 * Nicht eingetragene Unternehmen (unregistered businesses)
 * Eingetragene Einzelunternehmen (registered traders)
 * Offene Handelsgesellschaften & Kommanditgesellschaften - OH & KG (unlimited liability companies where one or more owners/directors assume liability)
 * Gesellschaft mit beschraenkter Haftung und Kommandit-gesellschaft, GmbH & CoKG,(restricted unlimited liability companies).

2. **Limited Liability Companies :**

 * Gesellschaft mit beschraenkter Haftung - GmbH (private limited liability companies)
 * Aktiengesellschaft - AG, (public limited liability, the majority of these do not have the right to sell their shares on the stock exchanges).

3. **Organisations not qualifying as companies :**

 * Verbaende und Vereine (includes co-operatives as well as traditional charities).

the company's creditors, Germany's laws demand a minimum paid-up capital of DM 50,000 for the GmbH at the time of registration. This does not mean that total equity capital in proportion to total capital is higher in Germany than in the UK. In fact, it is quite the reverse. It does, however, place severe restrictions on registration for limited liability for new or young companies.

Nevertheless, registration for limited liability status of the GmbH more than doubled between 1976 and 1986. On the other hand, the even more restricted AG maintained its registered numbers during the same time period. The equity capitalisation of the AG averaged around 53.1 million DM in 1986 while that of the GmbH was 438,000 DM.

4.3.2 COMPANY STRUCTURE AND COMPANY FAILURE IN GERMANY

There is a significant difference in failure rates between the GmbH and the AG. The number of AG's filing for bankruptcy and being admitted in 1986 was 13, compared to 2364 GmbH's. The rate of

TABLE 4-12 COMPANY REGISTRATIONS IN GERMANY 1987

	Companies	in %
Total	2,097,853	100.00%
Sole Traders (One Owner)	1,622,483	77.34%
Sole Traders (2 or more owners)	136,710	6.52%
Unlimited Liabilities (OHG/KG)	52,871	2.52%
GmbH & KG (*)	49,030	2.34%
GmbH (**)	219,666	10.47%
AG/KG auf Aktien (**)	2,780	0.13%
Cooperatives	7,022	0.33%
Charities	4,193	0.20%
State-Owned	3,098	0.15%

(*) partially limited liability companies.
(**) required to submit an Annual Report for public inspection.

Note : The figures are based on the poll of 1987 and are different from those of Table 11 which include some large sole traders, OHG/KG's and GmbH & KG's.

Source : Statistisches Bundesamt, Wiesbaden, Presse und Information, 1990

failure for the GmbHs increased by 141% against an increase of registrations of 129%. The increase in loss to shareholders was even higher, exceeding the 1976 figure by 305%. (Table 4-13). The failure rate of the AG over the last 10 years has been variable and shows no significant upward trend. One explanation for this is that the size of an AG virtually prohibits its filing for bankruptcy. The damage to the creditors and the economy is so great that the alternative, creditors and state subsidies, appears to be a cheaper way.

4.4 COMPANY FINANCE AND CREDIT

The previous sections of this chapter dealt with the overall magnitude of the bankruptcy problem in the two countries. Having

TABLE 4-13 LIMITED LIABILITIES IN GERMANY

(bankrupt limited liability companies which have sufficient assets to satisfy some of the creditors' claims)

PUBLIC LIMITED LIABILITY COMPANY (AKTIENGESELLSCHAFT)

	Total No. Co.	Assets in DM m	Bankruptcy No.	Assets in DM m
1976	2,177	79,231	9	45.2
1977	2,149	83,580	6	7.6
1978	2,141	86,114	4	98.9
1979	2,139	88,592	4	23.6
1980	2,141	87,000	5	12.8
1981	2,879	86,836	6	34.0
1982	2,140	99,164	16	42.0
1983	2,118	103,229	11	72.0
1984	2,128	106,947	11	72.0
1985	2,141	110,998	14	113.0
1986	2,190	116,398	13	82.0

Source: Statistisches Jahrbuch fuer die Bundesrepublik 1979-1987

PRIVATE LIMITED LIABILITY AND PARTIALLY LIMITED LIABILITY COMPANIES (GmbH)

	Total No. Co.	Assets in DM m	Bankruptcy No.	Assets in DM m
1976	147,233	73,356	980	110
1977	168,463	79,271	946	178
1978	195,890	85,104	1,010	84
1979	225,209	92,383	1,299	171
1980	255,940	99,059	1,334	194
1981	236,005	88,675	1,942	316
1982	293,693	114,451	1,769	387
1983	308,940	122,538	1,756	399
1984	324,724	129,724	1,769	401
1985	339,541	137,837	2,167	357
1986	336,371	147,422	2,364	442

Source: Statistisches Jahrbuch fuer die Bundesrepublik 1979-1987

established that the loss to creditors alone is quite sizeable in both countries and that there appears to be an equally sizeable spillover effect to the economy, the next question needs to deal in more detail with the creditors' composition. Specifically, the financial involvement of the individual creditors in the debtor company needs to be quantified. This will allow us to gain better insight into the actual cost distribution of bankruptcy. In addition, this information may show some evidence of the existence of asymmetric information which allows some creditors to move their portion of costs to other creditors. If such asymmetric information

exists, the economic cost to society may be quite substantial given the present magnitude of bankruptcies in both countries. The theoretical aspects of this question were dealt with in chapter 3.

The answer to the question of the distribution of losses through bankruptcy lies in the structure of company creditors and their potential ability to renegotiate the terms of contract. The relative strength of creditors vis-a-vis their debtor company and each other determines this ability. The following section of this chapter quantifies differences in company finance in both countries. It will address three questions which are central to the distribution aspect:

1. How are company assets financed the UK and Germany?
2. What is the composition of company creditors and is there an identifiable connection between the number and types of creditors and bankruptcy?
3. Given some differences between the financial systems of corporate finance in the UK and West Germany, is there statistical evidence that the composition of corporate finance influences the bankruptcy decision?

The comparative analysis of the different financing systems in the UK and Germany has been the subject of a number of publications in the last 20 years, though with a more specific purpose in recent times (13). In many cases the central theme of these publications has contained a message for change rather than one of abstract analysis. While German analysts frequently point the accusing finger to the lack of equity in German companies and the inertia of the German stock exchange (14), UK writers tend to criticise the over-dependence of their companies on the shareholders' return requirements, each critic citing the other country's system as a more favourable example (15).

Very few comparisons go beyond the simple analysis of the two sets of statistical country data. The usual danger hereby is that the analysts tend to skim over the fact that each commercial system is firmly embedded in its legal system. It is not possible to change a set system of company finance for another one without major changes in the legal and economic system. Change must be sought within the system to make it feasible.

4.4.1 COMPANY FINANCE

The official company statistics of the Bundesbank are grouped according to the three main categories of incorporation in Germany, the Aktiengesellschaft (AG), the Gesellschaft mit beschraenkter Haftung (GmbH) and the Personengesellschaft incorporating all corporate forms of unlimited liability. Average balance sheets from selected samples of each category are shown in Tables 4-14 to 4-16. Similar in all three categories of incorporation is the low amount of total shareholder's equity which includes share capital at par, revenue reserves and general reserves. In no corporate form is this higher than 30% of total asset value. For the AG and GmbH this low value does not even cover the long term fixed asset investment (16).

Comparing UK and German companies' balance sheet (Tables 4-14 to 4-17) and in particular their respective net worth has been difficult. This is due to the problems arising in the method of accounting for the obligatory reserves which consist mainly of funded pensions for the company's employees and of social security reserves in German companies' balance sheets. While some financial analysts prefer to categorise this item as part of shareholders' equity, others insist on regarding it as a form of accrued long term liability. Unlike the British system, pensions in Germany are funded in the form of reserves and stay within the company finance

TABLE 4-14 GERMANY : AVERAGE COMPANY BALANCE SHEET (AG) 1983

PUBLIC LIMITED LIABILITY (AG)
IN DM MILLION
(SAMPLE SIZE : 203)

ASSETS		LIABILITIES	
LONG TERM :			
FIXED	632	SHAREHOLDER'S	
FIN.INVESTMENT	130	EQUITY	162
		REV. RESERVES	235
CURRENT :		CAP. RESERVES	86
INVENTORY	516		
DEBTORS	514	OBLIGATORY	
CASH	223	RESERVES:	
OTHER	11	PENSIONS	268
		OTHER	311
		LIABILITIES :	
		BANKS & INST.	239
		SHORT TERM :	
		CREDITORS	704
		(INCL. LOANS)	
		OTHER	22
TOTAL ASSETS	2026	TOTAL LIABILITIES	2026

system.

In the UK, payments towards pensions and social security are made to independent financial institutions such as pension funds, thus consisting of payments made from the profit and loss account not appearing in the balance sheet. German pension and social security reserves are quite substantial, often approaching close to total shareholders' funds. As reserves, they contribute significantly to the internally generated funds of company investment.

With the exception of the legally required reserves, the assets are similarly funded in both countries by a combination of equity and debt. Equity funding in publicly quoted companies in Germany has been traditionally in the form of reserves. In companies which

TABLE 4-15 GERMANY : AVERAGE COMPANY BALANCE SHEET (GmbH) 1983

PRIVATE LIMITED LIABILITY (GmbH)
IN DM MILLION
(SAMPLE SIZE 199)

ASSETS		LIABILITIES	
LONG TERM :			
FIXED	196	SHAREHOLDER'S	
FINANCIAL INVESTMENT	50	EQUITY	98
		REVENUE RESERVES	35
		CAPITAL RESERVES	11
		OBLIGATORY	
CURRENT ASSETS:		RESERVES:	
INVENTORY	148	PENSIONS	67
DEBTORS	244	OTHER SOCIAL SEC.	80
CASH	51		
OTHER	8	BANKS & INSTITUTIONS	93
		SHORT TERM LIABILITIES:	
		CREDITORS	289
		OTHER	23
TOTAL ASSETS	696	TOTAL LIABILITIES	696

are not quoted on the stock exchange this type of funding has been a necessity. One of the more significant differences between the UK and German corporate financing appears to be the relationship of short term to long term assets. Current assets in German corporations tend to be proportionately larger than in U.K. In smaller German companies (Personengesellschaft), 70% of all assets are short term. The corresponding figure for the medium size companies (GmbH) is 65% and for the largest companies (AG) it is 60%. This compares with the overall UK figure of 56%. Short term assets in Germany tend to be financed with a mixture of long term and short term liabilities.

The Personengesellschaft finances only one half of its short term assets with short term funds, the GmbH two/thirds and the AG 60%. This means that a large proportion of short term assets are

TABLE 4-16 GERMANY : AVERAGE BALANCE SHEET

UNLIMITED LIABILITY COMPANY (PERSONENGESELLSCHAFT)
1983, IN DM MILLION
(SAMPLE SIZE 76)

ASSETS		LIABILITIES	
LONG TERM :			
FIXED	93	SHAREHOLDER'S	
FINANCIAL		EQUITY	116
INVESTMENT	34	REVENUE RESERVES	
		& OTHERS	11
CURRENT ASSETS :		OBLIGATORY	
RESERVES:			
INVENTORY	126	PENSIONS	48
DEBTORS	134	OTHER	50
CASH	38		
OTHER	3	LIABILITIES :	
		BANK & INSTITUTIONS	38
		SHORT TERM :	
		TRADE CREDITOR	162
		(INCL. BANK NOTES)	
		OTHER	3
TOTAL ASSETS	428	TOTAL LIABILITIES	428

Source : Stat. Jahrbuch 1987, Ch.7, Unternehmen & Arbeitsstaette
p. 132/133

(Note: The figures given in the Statistisches Jahrbuch relate to total figures for a given sample size. The figures here are the average of that sample size which makes a direct comparison of sizes much easier.)

financed by long term liabilities. Though there is a tendency to finance some short term assets with long term liabilities in the UK, the discrepancies are not quite as large. 82% of short term assets are financed by current liabilities. The main conclusion from this must be that the increased short term liquidity in Germany is needed to compensate for the low equity base. Without this cushion German industry on the whole would certainly be in a much more volatile position than its UK counterpart. The low

reliance on short term debt in Germany provides some safeguards against a sudden liquidity problem. While corporations in the UK hedge against the threat of bankruptcy with a sizeable equity base, German companies seem to achieve a similar hedge by placing more emphasis on long term rather than short term debt. As a result current ratios and long term debt ratios of German companies appear to be substantially higher than those of their UK counterparts. A summary of comparative accounting ratios are given in Table 4-18.

TABLE 4-17 UK : AVERAGE BALANCE SHEET
1983, IN £ MILLION

SAMPLE SIZE 1974

ASSETS		LIABILITIES	
LONG TERM :			
FIXED AND FINANCIAL INVESTMENT	65	SHAREHOLDER'S EQUITY	63
		MINORITY SHARES	6
		DEFERRED TAXATION	5
CURRENT :			
INVENTORY	31		
DEBTORS	34	DEBENTURES/LOANS	7
CASH	10	SHORT TERM :	
OTHER	8	TRADE CREDITOR	42
		BANK LOANS	21
		CURRENT TAX	4
TOTAL ASSETS	148	TOTAL LIABILITIES	148

Source : CSO Annual Abstract of Statistics, No.124, p.300 1988

Looking at the German accounting data one must also come to another interesting conclusion in relation to funding requirements. If German companies were to increase their equity base to UK standards by substituting equity for debt - as is so often called for - they would most certainly be overfunded. The amount of long term institutional debt is relatively low, though higher than in the UK. Substitution of such debt with equity would have only a marginal

effect on the equity ratio. The largest "liability" in the German companies' balance sheets appears to be the obligatory reserves required by law. As long as these are used for funding requirements, the demand for equity funding in Germany must be relatively subdued compared with demand in the UK.

TABLE 4-18 AVERAGE FUNDING OF FIXED AND CURRENT ASSETS

(1983, in percentage based on total Capital)

	AG	GMBH	PERSONENG.	UK
Fixed Asset Ratio	31%	28%	22%	44%
Equity Ratio	24%	21%	30%	50%
Obligatory Reserves Ratio	29%	21%	23%	
Long Term Institutional Debt Ratio	12%	13%	9%	5%
Trade Creditors Ratio (incl. Short Term Loans)	35%	42%	38%	42%
Inventory Ratio	25%	21%	29%	21%
Current Ratios	1.7	1.4	1.8	1.2

notes:
- Equity Ratio includes Total Shareholders' Funds.
- Obligatory Reserves includes pensions and others.
- Long Term Institutional Debt includes financial liabilities to financial institutions only.
- Trade Creditors' Ratio includes short term loans as well as trade creditors.

4.4.2 CREDITORS

In general creditors can be categorised in three main groups: shareholders, financial institutions and trade. The government providing credit in the form of deferred taxation represents usually only a small portion of company finance in any country. In German companies, however, the employees constitute a significant portion of the company's creditors, certainly comparable in size to what financial institutions advance on a short term and long term basis combined. Exact quantification of the proportions between the individual groups is almost impossible but some

approximations can be made (Table 4-19).

TABLE 4-19 COMPANY CREDITORS IN % OF TOTAL FINANCE

	AG	GMBH	PERS.G.	U.K.
EQUITY	24%	21%	30%	50%
EMPLOYEES	29%	21%	23%	0
BANK & INST.				
LONG TERM	12%	13%	9%	5%
SHORT TERM	35%	42%	38%	42%
of which :				
Trade		5%		28%
Bank		32%		14%
Other	-	3%	-	3%
TOTAL CAPITAL	100%	100%	100%	100%

N.B. One can assume that the figures are not wholly representative since only those companies which fall under the publication laws are incorporated here, i.e. the largest companies.

The highest reliance on formal loans occurs in the medium size German companies (usually GmbH's) where financial institutions provide more than 13% of total finance on a long term basis. The AG's, in comparison, rely on long term institutional finance to the tune of 12%, though one-quarter of this is provided from non-institutional sources. The smallest size companies, the Personengesellschaft, uses an even lower percentage than the AG. The greatest exposure of financial institutions can be found in the medium sized companies. A probable explanation for this is that small companies do not qualify for institutional loans and the large companies do not require them. The latter often have recourse to other forms of financing such as financing through subsidiaries and the stock exchanges (17).

There are, as always, some problems in comparing the UK company finance structure with their German counterpart. The most significant distortion of these figures arise through the different accounting systems. Areas such as depreciation, revaluation of assets and the formation of legally required reserves which are

accounted for as equity rather than debt distort the numerical comparison. However, the point here is to show the variety of sources of finance in the UK and Germany and any significant differences between them.

4.5 SUMMARY

The main objective of this chapter was to show the relevance of bankruptcy in both countries by establishing its magnitude and estimate its losses on the basis of available figures. Official bankruptcy statistics can only be assessed within the total business framework and by taking account of the individual country's credit markets and financial rules and regulations.

In both countries the rate of business and individual bankruptcies has been rising from 1977 to 1987 at an average of more than 8% per annum. The actual losses have been rising at more than twice this rate. In both countries corporate individual shareholders are the main losers in bankruptcy. In Germany shareholders contribute only half as much towards company finance as in the UK. Other creditors, such as the employees and the financial institutions, tend to be heavily involved in corporate financing and as such have an equally vested interest the state of the company's financial affairs. Creditors in the UK tend to be a less defined group. On this basis one could make a case that they are more readily agreeable to file for default of their debtor earlier than their German counterpart since there is a greater likelihood that at least part of their claim will be honoured. This would explain the higher rate of default in the UK even though German companies tend to have a higher risk incorporated in their financing structure. There is some evidence that creditors in the UK have a better chance of obtaining at least some of the money owed to them which is no doubt related to the UK higher frequency of filing for bankruptcy.

While there appears to be a higher risk for German private limited liability companies to default due to their low equity base, the distribution of short term and long term liabilities in relation to the respective assets somewhat alleviates the volatility problem somewhat. However, large swings in capital cost must be more detrimental for German companies than for those in the UK since there is a heavy reliance on fixed interest loans in Germany - a problem that necessitates a government monetary policy of low interest rates and a strong emphasis on fiscal regulation.

The conclusions to be drawn from the preceding bankruptcy statistics can be summarised as follows :

1. **More businesses file for bankruptcy in the UK than in Germany.** There is some evidence that the reasons might lie in the greater frequency of limited liability in the UK and the more distant relationship between UK companies and their creditors.

2. **There appear to be fewer assets available for distribution in Germany than in the UK.** This may be the result of more timely bankruptcy application in the UK. In Germany, the smaller limited liability companies have shown a larger increase of bankruptcy than any other category. This has been accompanied by a smaller coverage (available assets over debt). Since financial creditors rarely get involved in bankruptcies it is the task of the German managers to apply for bankruptcy. There appears to be little incentive for the German manager of a limited liability company to file earlier than required.

In the UK particularly in small limited liability companies company directors are asked by the financial creditor to

secure some loans. This may cause greater willingness of UK company directors to timely filing. The fact that the financial creditor is entitled to put the company into receivership must also contribute to a more timely declaration of insolvency.

3. **The individual groups of creditors of German companies appear to be more regulated.** To maintain order in such a network of creditors, the demarcation lines must be clearly defined by an absolute authority - in the German case by federal laws.

4. **Due to their financing structure, German companies are more volatile and are more liable to have liquidity problems.** The different distribution of long term and short term financing of assets may alleviate the situation. Because of high volatility of German companies in respect of interest increases, there must exist a strong consensus in the policies of companies, financial institutions and the government.

The above statistics give no clear evidence of the exact distribution of bankruptcy cost in both countries. One is led to suspect that the German system depends very much on strict legal control and that losses suffered by creditors in bankruptcy in Germany are frequently borne by society as a whole. The present coverage ratios and the number of cases rejected for official receivership leads one to suspect that this has become more and more the case. In the UK, due to the structure of creditors and method of company financing, the costs seemed to be borne to a large extent by the owners and creditors themselves. The next chapter will deal with the question of cost distribution in greater detail.

NOTES:

(1) According to officials in the Department of Trade and Industry only details relating to the category 'bankruptcy' need to be recorded. The statistics of creditors' voluntary liquidations are estimates.

(2) Scottish laws stipulate different reporting procedures particularly in the area of individual bankruptcies (sequestrations). There is no requirement to register private trust deeds. The Agencies responsible for collecting and collating bankruptcy and insolvency data are :

England and Wales	- Department of Trade and Industry
Scotland	- The Registrar of Companies, Edinburgh
Northern Ireland	- Department of Economic Development

see: Footnote, CSO Annual Abstract of Statistics 1987, 17.29, p.305.

(3) Major changes of the 1986 Insolvency Act are listed as :

(a) Replacement of receiving orders by bankruptcy orders.
(b) Introduction of individual voluntary arrangements,
(c) Changes in the treatment of insolvent partnerships,
(d) Imposition of a deposit for winding up petitions,
(e) Introduction of company voluntary arrangements,
(f) Introduction of administration orders where there is reasonable prospects of a company (or part of it) returning to solvency.

In : British Business, 22 April 1988 p. 40.

(4) The matter of over-indebtedness is not clearly defined by law. There appears to be a consensus that the calculations to determine the degree of indebtedness should be based on relevant and appropriate accounting indicators rather than on the annual financial statements. See : Schmid (1984), p. 7.

(5) See : Wirtschaft und Statistik, Reihe 3, March 1987, p.231

(6) The limited liability company form in Germany is much more infrequent than in the UK. The pure form accounts for about 2% of all German organisations classified as companies in the sense of limited liability.

(7) There is a difference between UK figures given in Table 4-2 and those of Table 4-1. Table 4-2 figures represent 'Receiving Orders made during the year,less those consolidated or rescinded before the end of the year, together with administration orders and deeds of arrangement on the same basis'. The figures in Table 4-1 are unadjusted bankruptcies and liquidations. See: British Business, 23 October 1987, p.29.

(8) See : Wirtschaft und Statistik, Reihe 3, March 1988, p.193.

(9) See Goesche (1985) p.27-28.

(10) Studies suggest that 90% of all assets of a bankrupt company were owned by secured creditors. Of these banks and financial institutions owned two-thirds, while traders only had a claim on 10%. In respect to coverage, financial institutions were able to satisfy on average 79% of their claims.

(11) See : Finanzielle Abwicklung der Insolvenzverfahren in : Unternehmen und Arbeitsstaette, Fachserie 2, Reihe 4,2, p.13.

(12) The number of domestic companies quoted in 1987 was 574 rising to 609 in 1988. See : Annual Report 1988/89, Federation of German Stock Exchanges.

(13) With the advent of an integrated Common Market in 1992 and the need to find a common set of rules relating to finance and credit among the community members the topic has become of prime importance at present.

(14) See Hax (1985), Uhlenbruck (1983), Drukarczyk (1984) et al.

(15) See for example Corbett (1988).

(16) The Balance Sheet format for the German and UK companies has been adapted to the US format to make a comparison easier.

(17) According to Edwards and Fischer in their forthcoming paper on the German financial system.

CHAPTER 5 THE ROLE OF LAW AND CREDIT

5.0 INTRODUCTION

It is now time to take a closer look at the regulatory framework around insolvency and at the individual parties involved in it.

The insolvency laws in the UK and Germany regulate the sequence of events after the company or its creditors have officially declared its insolvency status. Prior to this, the legislation is concerned only with the supervision of credit through a mechanism of credit guidelines from supervisory bodies such as the Office of Fair Trading and the Bank of England in the UK and the Bundesaufsichtsamt fuer Kreditwesen and the Bundesbank in Germany. These institutes regulate through their guidelines and considerable policing powers the lending practices of the financial institutions. Their guidelines determine the cost of credit and the degree of risk a credit institute is allowed to maintain in its lending portfolio.

In practice, however, insolvency is a process which involves the gradual deterioration of a company's cash flow and results in the termination of its credit facilities. The point of legal insolvency occurs usually when creditors refuse to extend existing credit lines or grant new credit when they do not see a likelihood of being repaid.

There is a distinct difference between technical and legal insolvency. A company is technically insolvent when the prospective cash flow projections cannot support existing credit commitments. Correct estimation of the point of technical insolvency requires perfect foresight about earnings. While a company may be technically insolvent, timelags in information to the company directors and creditors and overoptimistic analysis of future events on the part of the creditor may distort the true picture. This would delay the bankruptcy decision. Actual filing for

insolvency in legal terms may therefore not coincide with the technical state of insolvency.

In an ideal situation, the point of technical insolvency should trigger the initiation of legal insolvency procedures. This is usually termed the optimum filing time. The point of technical insolvency cannot be established with absolute certainty. The best that creditors can do is try to assess the financial situation of the company through a system of credit information and monitoring. This system then forms the basis of credit terms and credit costs which in turn reflect the solvency status of the debtor to all creditors and interested parties.

The main topic of this chapter is the regulatory and supervisory function of administrators and creditors in insolvency before and after the official decision to declare insolvency. The timing of this decision determines in most cases the residual value of the company and is therefore crucial to the maximisation of creditors' (and shareholders') wealth. A delayed decision may result in a reduced distributable value of the company, frequently to the disadvantage of unsecured creditors (1). Another major focus is on the way creditors are allowed to protect themselves through conditions they impose on the debtor company and against each other when the debtor company is in danger of becoming illiquid.

The main topics of this chapter are:

1. **Legal and administrative requirements**
   This concerns the bankruptcy filing procedures, costs and in particular a comparison of the steps leading to actual court applications and the court requirements of this process. This is useful for the analysis of direct bankruptcy costs in both countries.

2. Creditor access to information

Creditors' methods of monitoring debtor companies and the legal position of individual creditors. The ability to acquire internal information and the different civil and common laws regulating the position of the individual creditors are integral parts of this section.

3. Conditions of credit and terms of trade

This concerns the different categories of creditors in the UK and Germany. Included is a discussion of the determinants of the cost of credit to the debtor company, and constraints on the ability of the creditor to price for risk of insolvency of the debtor company.

4. Analysis and Summary.

The individual sections correspond essentially to the three types of bankruptcy costs discussed in Chapter 3. Direct costs arise from the administrative costs of bankruptcy proceedings. Indirect costs relate to credit supervision and credit assessment. External costs occur when individual creditors are in a position to gain either advance information on the state of the debtor company or information which is not available to other creditors and are able to act upon this information to their own advantage. They also occur when the monitoring system fails to give the right signals to creditors about the solvency of the company, resulting in discrepancies between technical insolvency and actual filing dates.

5.1 BANKRUPTCY LAW

5.1.1 INSOLVENCY LAW IN THE UK

In the UK, a distinction is made between bankruptcy and insolvency. Bankruptcy refers to individuals only. The term liquidation is used for insolvent companies. The difference lies in the liability status as mentioned in the previous chapters.

Until the 1986 Insolvency Act came into force, the legal framework of insolvency and the statistical categorisation of the 1868 Act prevailed. The bankruptcy statistics of the previous chapter relate to insolvencies as categorised essentially by the 1868 Act. Some modifications of that Act have been made since 1868, the latest being in 1976. The modifications in general concerned the update of individual items of the 1868 Insolvency Act, such as Directors' Disqualifications. For the purpose of this thesis these are of no significance. Under the old Act, company insolvency could take one of two forms : Creditors' Voluntary Liquidations and Compulsory Liquidations. The most common form of insolvency has traditionally been Creditors' Voluntary Liquidation which in 1987 exceeded the Compulsory Liquidations by a ratio of almost than 2 to 1 (2).

Voluntary liquidation can take the forms of Members' voluntary liquidation and Creditors' voluntary liquidation. In both cases a liquidator is appointed and the company ceases trading. In a Members' voluntary liquidation the company is seen to be solvent but unable or unwilling to trade any longer. Members' voluntary liquidation is not included in the official insolvency statistics.

The first step towards creditors' voluntary liquidation usually occurs in the form of receivership when one creditor appoints a receiver - in most cases an insolvency practitioner. While occasionally a receiver may be appointed to liquidate a specific

asset the more common form is the administrative receivership. Here a receiver is appointed by the creditor - usually a financial institution - holding a floating charge over the company's asset to take charge of the company with a view to selling it as a going concern, wholly or in parts. If this is not achievable the receiver will recommend liquidation. Creditors' voluntary liquidation is in many cases the result of a previous receivership where the receiver is unable to keep all or some parts of the company in operation and the creditors will not recuperate all of their money. While the authorities, in this case the Registrar of Companies, are notified of the existence of a receiver and a subsequent liquidator, they do not exercise judicial powers.

A company is forced into compulsory liquidation when it is unable to operate as a going concern because of continuous liquidity problems and is not able to pay off all its creditors. The petition to wind up a company may be made by the company itself, the majority of its directors, or by the creditors. Compulsory liquidations result in the dissolution of the company under court supervision. Under the 1986 Insolvency Act discussed below, the required deposit for winding up by creditors increased to £200.00 with a minimum debt to support the petition of £750.00. The increase in application fees has a deterrent effect on the frequency of application. Many creditors simply do not apply since they do not expect to recover any of their money.

After the deposit is paid and the petition is accepted, the court appoints an official liquidator who will wind up the company. At this time business ceases and employees are dismissed.

5.1.1.1 THE 1986 INSOLVENCY ACT

In the 1980's the Government became concerned about the rising number of bankruptcies and initiated an investigation headed by the insolvency practitioner Sir Kenneth Cork to evaluate the applicability of the 1877 Insolvency Act to modern insolvency cases. The subsequent Cork Report formed the White Paper for the new 1986 Insolvency Act. This Act widens the scope for receivership and aimed to set standards for the profession of insolvency practitioners. While most receivers and liquidators prior to the Act came from the ranks of professional accountants there were no legal requirements for their selection. In many smaller insolvency cases, ethical standards were not observed which, at times, led to a suboptimal disposal of assets from the point of some creditors (3). Apart from defining more stringently the scope and background of an insolvency practitioner, major changes in the Act may affect the losses suffered by creditors in bankruptcy in the future.

The first change involved the treatment of partnerships. Under the old statutes, partnerships were treated as bankrupt individuals rather than insolvent companies. A receiving order can be made against the partnership as a whole, or against the individual partner. Though bankruptcy orders may be made against the individual partners, this no longer necessitates the dissolution of the partnership. The new Act also makes provisions for the winding up of partnerships similar to that of companies. For this reason, insolvent partnerships are now included in the company insolvency statistics.

The second change, involving a possible decrease in bankruptcy cost, comes from the realisation that, in the past companies, were frequently wound up too soon and that many liquidated companies were viable had they been allowed to continue trading. This particularly occurred in those companies where no individual

creditor held a floating charge over the company's assets and the receivership was based on the voluntary agreement of creditors to grant a moratorium to the insolvent company. In many cases one or more creditors elected to disregard the non-binding moratorium and apply for a winding up order. To protect vulnerable but viable companies from the winding up orders of some creditors, a new form of receivership, the administration order was introduced in the new Act. Under the administration order, the affairs of the company are managed by a court appointed administrator. During this period, no resolution for winding up may be passed. Since the administrator is appointed by the authorities, his primary concern during the period is not to protect the secured creditor, as is the case in an administrative receivership. The administration order may be petitioned for by the company, its directors or a creditor. According to the Cork Report the tasks of the administrator are as follows :

1. to consider the reorganisation of the company and its management with a view to restoring profitability or maintaining employment;
2. to ascertain whether a company of doubtful solvency can be restored to profitability;
3. to make proposals for the most profitable realisation of the assets;
4. to carry on the business where this is in the public interest but unlikely that the business can be continued under existing management (4).

The task of the administrator can still, however, be obstructed or blocked when secured creditors refuse approval for the submitted proposals.

A third change involves the voluntary arrangements between creditors and debtor to facilitate orderly reorganisation or

receivership. Previous arrangements between these two groups depended on the continuous good will of all involved parties since no schemes were legally binding. The new act enables these arrangements to be made legally binding by allowing the arrangements to be executed under court supervision. The major drawback of these arrangements is that agreement must be reached among all and particularly among secured creditors. It can be assumed that voluntary arrangements work best in conjunction with an administration order (5).

The new act will undoubtedly have some major impact on the losses suffered by creditors in bankruptcy, though it is too early to reliably quantify.

5.1.1.2 INSOLVENCY PROCEDURES AND COST IN THE UK

In describing the existing insolvency procedures in the UK one must distinguish between receivership and actual liquidation. As stated, company liquidations are divided into compulsory and creditors' voluntary liquidations. The receivership procedure aims to re-establish the business as a going concern. The outcome of both types of company liquidation are the same - the business is dissolved and the assets of the company are sold off.

The receivership procedure is usually instigated by the bank which holds a floating lien over the company's assets. If the debtor fails to meet his repayment commitments to the bank and cannot provide a satisfactory explanation for this failure, the bank will usually commission an independent financial report on the company. This report, furnished within 3 - 4 days of the request, is designed to answer three questions.

1. Is the company able to survive without major changes but a possible capital injection ?
2. Should an administrative receiver be appointed?
3. Is the company beyond rescue and should a liquidator be called in?

In the latter two cases the bank will request the directors to appoint a bank approved receiver or liquidator. It is unusual for the bank to make the appointment directly. The receiver is usually appointed within 24 hours from the time of the decision. The receiver takes over the running of the business while at the same time advertising it for sale as a going concern - usually by tender. To assess the tender bids the receiver must prepare two valuations: one for sale as a going concern - the book value - which reflects the cost of assets, and one for sale of the individual assets at auction - the break-up value. The time allocated to the receivership is usually no more than three months. If the company has not been sold within that time, the receiver will recommend the appointment of a liquidator. The receiver's fees and costs are met from the estate. Current fees range between 5 and 10% of sales value.

The appointment of a liquidator in a voluntary winding-up scheme requires a resolution of the creditors at a specially convened creditors' meeting. When the liquidator takes charge, all business ceases and the employees are given notice. The Department of Employment guarantees unpaid wages up to a limit of £160.00 per week. Employees with claims higher than this become individual unsecured creditors of the firm.

The task of the liquidator is two-fold. Firstly, he is charged with the winding up of business and with the sale of the existing assets. The fee for this service averages around 15% of sales value. Secondly, he has to distribute the proceeds among the

various claimants which include all registered creditors. In general, the distribution fee amounts to an additional 7.5% of asset sales proceeds, so that the total liquidator's fee can be estimated to come to 22.5% of the break-up value of the firm.

In terms of absolute fees, the receivers' remuneration is frequently much larger than that of the liquidator. The sales value of a company as going concern can be at a premium of more than 5 times its break-up value - a figure that does not appear to be unusual in the typical larger company failures (6). While unsecured creditors may be able to receive a substantial percentage amount of their claim - often more than 50% - in the case of receivership sales, a liquidator will rarely satisfy the unsecured claimant by more than 10%.

Compulsory liquidation incurs costs which are in addition to the creditors voluntary liquidation. These costs include the cost of application, the court costs and the fees for compulsory audit. While the application fee is borne by the individual creditor who applies for a court order, the other fees are distributed over all unsecured creditors. The costs prior to the meeting of creditors may amount to £20,000 in a creditors' voluntary liquidation. The same costs would be £120,000 in the case of a compulsory winding up order. The reason for this is that the compulsory winding up audit is more extensive and more time consuming, while the audit for the voluntary liquidation has already been done in the process of receivership or in the early investigation period (7).

There are two main reasons for a creditor to apply for a court order to wind up a company rather than elect a cheaper creditors' voluntary liquidation.

1. There is no creditor who holds a floating charge over the company's assets and some creditors fear that their

priority claim may not be honoured as stipulated. There is either a dispute among the creditors in progress or one anticipated.

2. There is some doubt about the honesty of the directors and the safety of the creditors' claim.

Liquidations of company assets may last for several years. On average it appears that it takes 3 to 4 years to liquidate and distribute the assets of a medium sized company. Large liquidations with conflicting claims can last between 5 and 10 years. Though most of the assets of a liquidated company will be sold within the first year or two of liquidation, the dispute over the distribution usually prolongs the liquidation period substantially.

5.1.2 BANKRUPTCY LAW IN GERMANY

Unlike the UK system, the German laws do not distinguish between bankruptcy and insolvency. Companies and individuals alike can be bankrupt, though the requirements for filing and the process itself is somewhat different for limited liability companies and personal liability companies and individuals.

Any unfulfilled claim against of a preferred or unsecured creditor can only be satisfied through the civil courts. In individual bankruptcy cases, a creditor brings an injunction against his debtor. If the lower court (Amtsgericht) judges the claim to be valid, payment is enforced by an officer of the courts through foreclosure. When property and belongings are found to be insufficient, the debtor must make a public declaration to this effect and take a public oath (Offenbarungseid).

Insolvency of companies does not require liquidation procedures unless insolvency of the debtor company involves its preferred and

unsecured creditors. If a company defaults on payments secured by property or specified assets, the creditor can repossess the assets after submitting the necessary documentation to the courts. The application for bankruptcy in Germany is generally not made by the secured creditors but by the unsecured creditors or the company itself. The purpose of the application is to seek protection of the unpledged assets and to safeguard their orderly distribution. All insolvencies must be referred to the German courts. The courts determine the degree of insolvency and the amount of distributable unpledged assets. An out of court arrangement, like the receivership or creditors' voluntary liquidation in the UK, is not available during the bankruptcy proceedings though a court supervised reorganisation (Vergleich) can be agreed by the creditors.

According to Number 207 paragraph 1 of the Insolvency Law (Konkursordnung), a limited liability company is insolvent if it is unable to pay its current commitments or is overindebted, i.e. the total liabilities are equal or larger than its assets. A personal (unlimited) liability company is judged insolvent in the first case. If a company becomes insolvent the directors must apply to the relevant local magistrates court within 3 weeks. Failure to do so results in prosecution of the directors of the company. Creditors may apply when claims are not honoured. After accepting the application for insolvency protection the court appoints an administrator (Konkursverwalter) who has the same task as his British counterpart: he drafts the liquidation account and accumulates a list of creditors on the basis of their claim and priority status.

The main tasks of the German liquidator are described as follows:

1. He must verify and secure the existence of all company property and sell those assets he is authorised to sell

as profitably as he can.

2. He must distribute the proceeds on the basis of creditors' priority.

More than 75% of all applications for bankruptcy are, however, not proceeded with, since there is evidence that the liquidated assets will not cover the expense of the courts and the court appointed liquidator. Secured creditors have no part in the actual liquidation and the payments for the proceedings only take into account the assets of preferred and unsecured creditors when assessing liability for costs.

5.1.2.1 PRIORITY RANKING

Observing priority ranking is usually done with strict adherence to the laws. Absolute priority ranking is also the most contentious of the present insolvency laws and is often held responsible for delaying bankruptcy proceedings. As will be shown, the relative creditor bargaining weights in Germany are unevenly distributed so that strong creditors may achieve priority ranking even before liquidation procedures commence.

The German law distinguishes between two types of assets and four different categories of creditors (Table 5-1). The first group, secured creditors, is paid off before the liquidator and the courts receive their fees. Since this group has a lien against one or several assets, these assets are separated from the assets available for liquidation (liquidation assets). Creditors secured by mortgage lien (Aussonderung) will receive title to the property. If the assessed value of the property exceeds the amount of the lien, the surplus is refunded to the liquidator. If it does not, the secured creditor will join the ranks of the unsecured creditors (Rank 4). In the case of a general or non- property based lien

(Absonderung) the claim of the secured creditors will be satisfied from the disposal of the assets nominated in the lien title. In general, the liquidator or some other official is charged with the disposal of these assets and also distributes the proceeds, in the first instance to satisfy the lien holders.

TABLE 5-1 PRIORITY RANKING FOR GERMAN CREDITORS

ALL		1. SECURED CREDITORS
		a. BY MORTGAGE (AUSSONDERUNG)
		b. BY OTHER LIENS (ABSONDERUNG)
ASSETS	LIQUIDATION	2. PRIOR TO PREFERRED CREDITORS
		a. LIQUIDATION COSTS
		b. LIQUIDATION DEBTS (*)
		3. PREFERRED CREDITORS
		a. EMPLOYEES
		b. REVENUE COMMISSIONER/ SOCIAL SECURITY
		c. RELIGIOUS AND STATE INSTITUTIONS (**)
		d. PROFESSIONAL / MEDICAL
		e. TRUSTEES
		4. UNSECURED CREDITORS

Source : Delfmann (1984) p. 630

* Debts arising from the liquidation process
** Religious institutions are financed from a voluntary fixed percentage tax (Kirchensteuer) which is collected in conjunction with income tax.

If the initial investigation shows that the first two ranks of creditors will not be satisfied or, if after their claims are met, no assets are at the disposal of the liquidator to pay the liquidation proceedings, the courts will turn down the bankruptcy application from the creditors or the company. Those assets which are encumbered by a lien are handed over to the secured creditors. If any remaining assets are available but insufficient to cover liquidator costs, their distribution is in the hands of the unsecured creditors themselves (8).

When liquidation is proceeded with, the preferred creditors are satisfied first as set out in Table 5-1. While the liquidator receives his fees prior to either preferred or unsecured creditors, the preferred creditors are satisfied in priority order, with the employees receiving their claims first and trustees of minors and similar being last in the preferred creditors' list. The remaining assets are distributed on a proportionate basis.

An administrative receivership which permits the receiver to investigate the possibility of keeping the company afloat only exists in Germany within the legal framework. The option of reforming the business as a whole is somewhat similar to the Administration Order in the new UK Insolvency Act of 1986. This is typically done in an creditors' arrangement, 'Vergleich', again under court supervision but with the (binding) agreement of all the major creditors. The rather inflexible forms of German Bankruptcy laws have frequently led to state intervention in the proceedings to persuade the secured creditors to agree either to an arrangement or to a rescue operation in which they themselves would bear some risk.

5.1.2.2 APPLICATION AND FILING TIME

While in the UK bargaining between the creditors occurs primarily during receivership and liquidation, this is done in Germany prior to the actual filing time. In Germany, the secured creditor usually does not apply for a court order to put the company into liquidation. If the debtor defaults on payments which are secured by an asset, the creditor is entitled to apply to foreclose on that asset only. Application for bankruptcy is most frequently made directly by or on behalf of the preferred and unsecured creditors. In a limited liability company directors themselves apply. The applicant is responsible for the cost of filing, though these are of nominal nature.

Because the claims are satisfied strictly according to priority rule, the timeframe for bankruptcy proceedings is less than those in the UK bankruptcy proceedings. More than 80% of all claims are settled within two years of start of proceedings, while the average time in the UK is between three and four years. Some bankruptcies take longer if the liquidator decides to prosecute. The causes for prosecution lie in the pre-filing activities. It is illegal for a creditor to secure liens on company assets if he is aware of the company's liquidity problems. If an unsecured financial creditor, therefore, secures his claim rather than make an application for insolvency of his debtor, the creditor is acting illegally and is liable to court proceedings - apart from the fact that his creditor status is reduced to that of an unsecured creditor. Prior knowledge is difficult to prove by a liquidator, though some out-of-court arrangements show that the problem exists and that it may be substantial (9).

5.1.2.3 THE CASE FOR REFORM

In 1978 the Kommission fuer Insolvenzrecht, a group of 22 legal insolvency practitioners and other insolvency experts, was commissioned by the Minister for Justice to submit proposals for fundamental changes of the 1877 Bankruptcy Act. These proposals were submitted to the Minister in 1984. While most experts in Germany, including the Statistische Bundesamt, (Statistical Office) agree on the necessity for insolvency law reform, no law has been passed by the Bundestag so far.

Two main problems have frequently been cited as reasons for changing the German insolvency laws :

1. In the last 20 years there has been a steady decline in insolvency cases accepted by the insolvency judge to have any distributable assets.
2. Even those cases accepted showed an increasingly lower pay-out ratio over the years, due to higher demands for security and collateral from the lending institutions.

The main causes of these problems are the ever decreasing equity capital ratio of the German companies which eliminates the safety margin of creditors and the ever increasing safeguarding of employees remuneration , social security and pension payments. The latter is said to affect the timing of bankruptcies.

It is generally felt that the old legal system works to the disadvantage of the smaller unsecured creditor who has less investigative resources at his disposal than his larger financial counterpart, the bank, and is not protected by strong government legislation, like the employees. The fact that more than 75% of all bankruptcy applications are not proceeded with - considering that during the last 10 years the number of bankruptcy cases have risen

substantially - has raised the suspicion that financial institutions are pressuring companies in trouble for increasingly more security backed loans, while at the same time delaying filing for bankruptcy. Financial institutions in Germany have a special relationship with the company they finance and are more directly involved in the company affairs than their British counterpart. Reform proposals have included calls for restricting the banks' advantageous position by changing the priority rule in the case of bankruptcy (10).

Reform proposals of the commission for Insolvency Law Reform revolve around five points :

1. The difference between bankruptcy and reorganisation procedure should be abolished and both types should be amalgamated into one.
2. Only after an official investigation should the decision be made whether the insolvent company should be reorganised or liquidated.
3. The present reorganisation procedures should be extended to include changes in the capital, organisational and management structure.(11)
4. If a reorganisation is not judged to be the optimal solution then the company should be liquidated without delay.
5. The rights of the secured creditors should be included in the insolvency procedure and their special position reduced to improve the functioning of the insolvency law and the coverage ratio of the unsecured creditors (12).

It is mainly the last point which has been a bone of contention. Specifically proposed is a retention of 25% of the secured creditors' claims. This amount is to pay partially for the services of the liquidator and the legal expenses, and to contribute to the

increased pay-out of unsecured creditors. While the proposals of the insolvency laws were written by a bi- partisan group of experts, the report itself and its terms of references were commissioned by the then ruling Social Democrats in the late 70's. The present ruling coalition of the Christian Democrats and Free Democrats is less in favour of changing the priority rule. The main argument put forward concentrates on undesirable legal interference in the bargaining process between the various categories of creditors. A redistribution of part of the assets claims of secured creditors would result in a destruction of the free market principle.

As to point 3 of the proposal, the present government representatives maintain that the creditors should be allocated a more active role in the reorganisation process. The proposals stipulate that a court appointed independent administrator should manage the insolvent company's affairs with little reference to the existing creditors (13).

5.2 CREDIT INFORMATION AND CREDIT MONITORING

The function of credit is to finance company production in the form of working capital and fixed assets. While short term credit is designed to assist in the procurement and manufacture of goods and services, long term credit helps with the purchase of equipment and other fixed assets. Credit terms stipulate, among other things, the timing of payments and the conditions which apply when payment is delayed. These conditions specify the obligation of the debtors in cases of non-payment and the assets the creditor is entitled to repossess if such an event occurs. Above all, they form the basis of credit cost calculation for the debtor company and are accounted for in the overall bankruptcy cost as indirect costs. Indirect bankruptcy costs arise when the terms of the company borrowing are

such that lenders are insufficiently compensated for the risk they bear.

Creditors must determine the risks of a prospective debtor before granting credit. When a debtor is judged to be creditworthy, the degree of his creditworthiness is then assessed. This degree determines the cost and the size of credit to be advanced. Aspects such as company size, age and type of business are taken into consideration. Typically, a company which has been in business for 20 years, has a steadily rising turnover of several million and manufactures goods for which there is a stable market will more easily obtain low interest credit than a small start-up company whose product line is untried and new. As the German official bankruptcy statistics show, new companies, i.e. companies less than 8 years old, are much more likely to become insolvent than older companies. Similarly, small companies have more liquidity problems than medium size and large companies. Credit risks will be efficiently priced if creditors are fully informed about the activities of the borrowing company, and the credit market is competitive so that neither lenders nor borrowers can exert monopoly power.

5.2.1 CREDIT INFORMATION PUBLICLY AVAILABLE

The system of obtaining credit information on debtor companies is very similar in the UK and Germany. Publicly available information about the credit status of a particular company originates from two sources : from the company directly and from credit information agencies. Companies transmit information to their investors and creditors primarily through their annual reports, but also through periodic statements during the year, reports on current or future projects they plan to undertake and other press releases. While the published information tends to describe the activities and scope

of the individual company, the financial status is a subject for investors' analysis. The analysis of company data is undertaken by teams of specialists, usually agents of investors or large creditors.

Credit information agencies sell their collected company data usually attaching some sort of analysis or rating. These agencies will also provide special reports on one company or a comparative study. Reports on companies are continually updated and may include not only financial data but also financial ratios and industry statistics. The cost of this information depends on the type of service and can range from a few hundred to several thousand pounds.

Other public sources of information are provided by government agencies, such as Companies House, giving details of the financial position of the individual company. The Central Statistics Office and the Bank of England Publication offer aggregate statistical background. In Germany, the Bundesamt fuer Statistik and the Bundesbank issue similar data. However, the German equivalent for Companies House, Hoppenstedt Companies' Reports, furnishes data on fewer companies. There are two main reasons for this. First, most German companies are organised in the form of a private unlimited liability or GmbH. Second, the reporting requirements for private unlimited liability companies and for GmbH's are less stringent than those for AG's and therefore less informative than those of public liability companies.

On the other hand, the requirements placed on German banks to provide confidential reporting on their customers to the Bundesbank and other official institutions are more elaborate than in the UK, though the resulting statistics are made publicly available only in aggregate form.

5.2.2 CREDIT INFORMATION AVAILABLE TO SOME CREDITORS ONLY

Although some data is publicly available, much information about the financial status of the company is restricted to certain groups of creditors only. While there is little concrete evidence of the existence of such uneven distribution of credit information in the UK, there is no doubt that it exists in Germany. That some classes of creditors are often able to profit from their privileged position is shown by the much publicised court case of the liquidator of Beton- und Monierbau against the Westdeutsche Landesbank, discussed below. It is therefore important to distinguish between the classes of creditors who have advance information, and how this comes about.

The theoretical background of the effects of asymmetric information has already been discussed in chapter 3. However, there is a difference in the way the term 'asymmetric information' is used when discussing credit and when discussing insolvency. Some authors define asymmetrical information as a situation when the borrower knows more than all lenders, a situation which can lead to credit rationing. Here, we also include cases when some creditors have more information than others (14).

In the first case credit markets with asymmetric information are those in which creditors have little information about the probability of the debtors' default. If the debtor is not very well known in the credit market most creditors will resort to cautious lending behaviour. Lending to such debtors is typically restricted in amount, very costly in comparison with that to established and larger debtors and hindered by excessive security requirements (15). Cable and Turner (1983) put forward the argument that such asymmetric information about the debtor has led to excessively high capital costs in the UK as opposed to countries like Germany, where

they claim this problem is reduced to a minimum, since the major creditors have better access to company information through the existing German company structure. The rather large difference in capital cost of both countries is born out by the statistical data presented in the next section of this chapter.

The second case of asymmetrical information relates to the uneven distribution of information among the claimants of the company. Current details and records of the financial status of a company are kept in that company's accounts department. The current cash flow situation, expected liabilities and funding requirements are only known to the relevant department heads and the directors of the company. In the UK, company directors acting as owners' agents will transmit any relevant details of the company to their shareholders. They keep an arm's length relationship with the creditors of the company and the communication between the company and its creditors is formal.

In Germany, the employees and the banks have a special relationship with the company being frequently both creditors and shareholders. In addition, the employees have certain statutory rights. The differences between shareholders, creditors and employees are much less marked in Germany compared to the situation in the UK. As a result the prominent role of management acting in the interest of the owners is diluted. German management must satisfy the information requirements not only of the company's shareholders but also that of its creditors and employees.

5.2.2.1 EMPLOYEES AS CREDITORS AND DIRECTORS

As mentioned already, German employees have a much closer relationship with their company than their British counterparts. Not only is the company contractually responsible for the payment

of wages and social contributions but also for the payment of company pensions. These company pensions, as opposed to pension contributions made by the company to the state pension system, remain as invested capital in the company and contribute as a significant portion to the company's financing structure. While these funds do not yield an explicit return, the contractual arrangement with the employees stipulates a fixed pension arrangement (as a percentage of their last salary regularly increased in line with staff salary increases) which these investments must fund.

Since 1972 German Company Law (Betriebsverfassungsgesetz) has determined that employees in companies with more than 50 employees have the right to elect a works council. The works council must be informed in advance of all personnel-related decisions of the company. These include among others the hiring and dismissal of personnel, redundancies, overtime, short-time working and salary grading scales. Moreover, the council can veto many of the company personnel decisions. The establishment of these councils not only gives the work force a voice in managerial decision-making but also provides a source of internal information to the employees about the financial status of the company. With companies of more than 2000 employees, the 1976 Co-determination Act comes into effect. This stipulates that the works council has the right to elect 50% of the company's Supervisory Board which has the task to appoint and supervise the management board (Vorstand). The Supervisory Board consists typically of 11 members of which 5 must be employee representatives and at least 2 of these must be employees of the company. The eleventh member is usually a 'neutral' or 'independent' member chosen from the legal or academic professions. He has the casting vote in the event of a tie. The shareholders have the right to appoint the 'neutral' member. The Supervisory Board controls all long term activities of the company. In contrast to the UK type Board of Directors which safeguards the financial

interests of the owners of the company, the Supervisory Board does not get involved in the day to day decisions of the company and has no representative of the management among its members. It is generally said that the Supervisory Board has worked well in the past in terms of consensus decision making (16).

The German works councils must not be confused with trade union organisations. While many works council members may also be members of a trade union, it is not mandatory. The primary function of the councils is to improve the flow of information between employees and managers. The result of the works council system, particularly in larger companies, is that German employees, or rather their elected representatives in their role as creditors and directors of the company, are able to obtain more detailed information about the company and its financial conditions than their British counterpart. This applies equally to the filing for bankruptcy. Here the works council must have prior knowledge of the company's intention since it involves personnel decisions in the form of redundancies. (17)

5.2.2.2 THE BANKS AS CREDITORS AND DIRECTORS

The difference between the UK and German corporate financing patterns is mirrored in the different activities of their banking systems. Not counting equity and employee financing, the German banks provide by far the largest share of debt funding in the corporate sector, both on a short term and long term basis. In the equity sector they are similarly exposed. In 1988, German banks owned 6% of all ordinary and preference shares (Table 5-2). German banks are also heavily involved in the actual share dealing and dominate the boards of the exchanges (18). With such large exposure to business financing, the short term portion of which is largely loaned on an unsecured basis, German banks have sought to protect

themselves preferentially against the probability of default.

TABLE 5-2 BANK OWNERSHIP OF INDUSTRIAL SHARES
July 1988 (in DM million)

	Total Lending to non-financial Institutions	Share Ownership	in %
All Banks	2,380,256	144,613	6%
High Street Banks (*)	572,159	52,180	9%

(*) these include Deutsche and Dresdner Bank and Commerzbank

Source : Statistische Beihefte zu den Monatsberichten der Deutschen Bundesbank, Reihe 2, September 1988, No. 9, 'Wertpapierstatistik'.

As Cable and Turner (1983) observe, the German banks have involved themselves in company affairs to secure more detailed information about the companies they invest in. This occurs on long term as well as short term lending. Traditionally, UK banks have lent primarily on a short term basis. Only recently has this changed.

In both countries long term lending by banks and financial institutions is usually secured by specific assets so that the bank can immediately liquidate the asset in case of default. While the UK bank tends to go through the procedure of a receivership rather than foreclose, the German bank can apply to the court for just the one specific asset to be signed over.

In the short term lending market, the differences between the UK bank and the German bank are quite significant. Virtually all UK short term bank lending, whether in form of contracted term loan

or overdraft, is secured. Only amounts of less than £25,000 may be of an unsecured nature (19). Short term institutional lending in Germany is usually provided by the Hausbank and is unsecured. This applies mainly to overdrafts but also to some term loans. If the borrower defaults on payments the German bank may become an unsecured creditor, with very little hope of seeing any repayment in the case of bankruptcy.

An additional difference between Germany and the UK lies in the German companies' ties to one main bank. Most German companies deal primarily with one bank (the Hausbank) for most of their financing requirements. This Hausbank usually acts as advisor to the company in all financial matters. Detailed information about the company's financial affairs are scrutinised by the Hausbank in one of three capacities :

1. as director of the company in its capacity of shareholder or shareholders' representative,
2. as director of the company without equity, and
3. as holder of the company's current and loan accounts.

As Table 5-3 shows, banks frequently occupy director seats of the company in which they hold equity. For the larger companies (AG), they also hold directorships but do not always own equity. In the GmbH's, and particularly in the private companies ('Others' in Table 5-2) they may hold equity but are not directly represented on the directors' board.

5.2.3 CREDIT MONITORING BY BANKS

Because of the above differences in the degree of security for loans, it is very much in the German banks' interest to monitor the state of affairs of a company on a regular basis, though this

TABLE 5-3 EQUITY OWNERSHIP AND DIRECTOR REPRESENTATION BY GERMAN BANKS

	No. of Directors' Seats	No. of companies in which equity is held	
Type of Incorporation	All Banks	All Banks	Commercial Banks only
Public Liability (AG)	961	242	221
Private Liability (GmbH)	319	501	352
Others	64	208	105

Source : Monopolkommission, Hauptgutachten 1973/75/80

monitoring process is also a regular feature in the UK control system. While the German Hausbank holds most of the accounts of a company, this may not be always true of the UK banks. Apart from receiving the usual financial information provided by the company, banks in both countries are able to look at current company trading figures. This is done in Germany on a regular basis especially since the Hausbank is reasonably sure that the company holds no other major current accounts with other banks. Shortfalls in receipts and unusual outflows from the account can be detected early. In most cases, the relevant bank manager will visit the particular company to seek an explanation for the poor trading figures. This may be done without the company actually showing signs of financial distress or even nearing the limit of the agreed overdraft. In the UK, only distress signals will usually trigger actions by the lending bank, though some prior investigation may be instigated without them.

Other forms of monitoring include the internal computerised client

information system. All loans of more than 1 million marks must be communicated to the Bundesbank, which in turn informs all other licensed banks of the details. In the UK, banks are required to give details of their largest loan exposures to the Bank of England on a periodic basis. However, there is no UK legal requirement for the Bank of England to furnish other banks with this information (20).

5.2.4 CREDITORS PROTECTED BY LAW

Certain groups of creditors have their status protected by the legislature. The main reasons for this appear to be that :

1. the creditors are composed of a number of individuals unable to operate an effective control and bargaining mechanism or,
2. the creditors are organisations who cannot effectively monitor every business enterprise due to the nature of their businesses.

The first group consists usually of employees. In both countries the state provides an insurance scheme which allows the outstanding salary claims of employees to be paid even if their companies default. In the UK the amount is limited to £160.00 pound per week. Any claims from employees over and above this sum must be recovered by the individual employee as an unsecured creditor. Claims for the recovery of the above sums are then made by the state, i.e. Department of Labour, or in Germany the Bundesanstalt fuer Arbeit, who receive the status of preferential creditors.

Creditors of the second group usually consist of the Department of Social Welfare for unpaid social security payments, the Internal Revenue Department for unpaid income taxes and the Customs and

Excise Department for unpaid Value Added Taxes and similar.

In Germany, preferential status is accorded by law to the two main church organisations on whose behalf tax is collected by the revenue commissioner and certain professional classes as well as trustees for minors who might have a claim against the company. No other group of creditors receives legal protection, though in many states in Germany a government fund is set up to help small companies or suppliers who would find it difficult to survive if their debtors defaulted.

In addition to legal protection, insurance schemes exist for certain creditors and shareholders in Germany. A pension protection scheme, Pensions Sicherungs Verein, guarantees the employee the payment of the company pension in the case of insolvency. A small shareholders protection scheme protects the par value of the non-institutional shareholder (21). The costs for these schemes are borne by the companies.

Much has been written about the bargaining process of creditors after the debtor has filed for insolvency. This, however, can only apply to systems which are flexible enough after the filing to allow for such bargaining. In Germany, the system has proved to be inflexible. As shown, there is more incentive for some creditors to secure their positions before the official courts get involved and before there is a legal requirement for the debtor or creditor to file. The information and monitoring systems are therefore of greater importance in Germany than in the UK.

5.3 CREDIT TERMS AND CREDIT COSTS

This final section deals with the security of credit and related credit costs. For the most part, the discussion will revolve around

the spread of credit rates from financial institutions and the terms and credit costs of trade creditors. The other two important groups of creditors, shareholders and employees, have no stipulated rate though it can be assumed that shareholders and employees' required returns are similar to each other. The similarity is more pronounced in Germany where the employee is a formal creditor of the company whose return on credit is tied to the level of future salaries to be paid out of future company earnings. This section will discuss the credit terms and cost of trade creditors. The final part will compare the terms and costs of financial creditors.

5.3.1 CREDIT INSURANCE

Trade creditors can be grouped into two distinct types : the suppliers of tangible goods, and those who supply intangibles such as services. Suppliers of tangible goods usually secure their claims with a lien on the goods supplied. In both countries the terms of trade appear to be similar. Debtors are given a certain period to settle - frequently 30 days from time of invoice, though this depends on the type of industry. Earlier settlements are rewarded with a cash discount, such as 2%, as stipulated in the sales conditions.

In Germany, most suppliers of tangible goods protect themselves against default by imposing the 'Absonderung' condition, that is, they specify the lien of their claim and are paid before preferred and unsecured creditors. Since no other creditor can have a prior claim against the asset, the trade creditors' claim is relatively secure. A problem arises when the goods supplied have been used in the debtor's production process. In this case several trade creditors hold a claim against the same asset. The proceeds from the sale of this asset in case of default are distributed among

those creditors holding a lien against it. If the proceeds prove to be insufficient, the trade creditor joins the rank of unsecured creditor.

Suppliers of intangible goods and subcontractors are in a more precarious position. Upon default of their debtor, they usually join the ranks of unsecured creditors with little prospect of receiving any of their claims.

One common means of protection for trade creditors and subcontractors is to acquire a credit insurance. The cost of this insurance in Germany may amount to 0.25% of the outstanding amount. Payments are only made when the debtor defaults. The insurance premia vary on the basis of type of creditor and trade record.

The trade creditor in the UK is in a more subordinate position regarding his claims. While he will secure his outstanding claims through a lien, this lien is usually subordinate to the floating lien held by the short term financial creditor. As mentioned in the previous section, the debtor's bank holds a floating lien over all assets when granting overdrafts or other loans. In most cases, the banks' claim takes priority over the trade creditors' claim unless the latter claim is identifiable and separated from the floating lien.

Credit insurance in the UK operates under two umbrellas, that of comprehensive factoring and that of straightforward insurance. Factoring is simultaneously a form of financing as well as insurance. As result the cost of factoring ranges from about .5% of invoice to more than 3%. The first figure relates to a simple credit insurance cost, while the higher figure includes financing.

In summary, it appears that German trade creditors hold a more secure position than their British counterpart. This is reflected

in the cost of credit insurance and probably in the price structure of goods. In addition, the existence of state rescue packages in Germany for creditors in trouble reduces the amount of invisible price insurance built into the cost of goods structure.

5.3.2 THE COST OF BORROWING

The cost of borrowing depends on the creditworthiness of the applicant. Banks, as the main lending institutions, assess the commercial borrower on the basis of his turnover, track record and future potential. While interest rates of the UK and Germany tend to differ because of different government monetary and fiscal policies, the interest differentials between the interbank lending rates and the individual categories of borrowers give some insight into the credit risk assessment in both countries. As a rule, one should expect borrowers with a high credit risk to pay a higher risk premium than those who are unlikely to default.

In the UK, commercial loans are quoted on the basis of the base rate, the lowest lending rate available. This base rate depends on the Treasury's recommendations, with the Bank of England implementing these. In Germany, the ministry for finance and the Bundesbank are to a large degree independent of one another, though the Finance Minister may make recommendations to the Bundesbank regarding interest rate levels. The Bundesbank controls the interest levels rather tightly, allowing the individual institutions little scope for competitive rates. Interest rates are pegged at the Bundesbank rates, which consist of a dual rate structure expressed by the Lombard and Diskont rates.

Though the information on interest spread between interbank lending rates and commercial lending rates is incomplete, it is possible to state that the interest spread in Germany is significantly less

TABLE 5-4 INTEREST RATES AND INTEREST DIFFERENTIAL BETWEEN THE UK AND GERMANY

A. UK September 1988

	LIBOR	Average	Difference
Overdraft	11.94%	16%	4.06%
Fixed:			
Medium Term		14.5%	2.56%
Long Term		15.5%	3.56%

Source : Bank of England Quarterly Bulletin Aug. 1989, Vol 29, No.3. D. Barrett, Manager, National Westminster Bank (22).

B. Germany August 1988

	FIBOR	Average	Spread
Overdraft	5.5%	8.25%	2.75%
Fixed :			
Medium Term		7%	1.5%
Long Term		8%	2.5%

Source : Statistische Beihefte zu den Monatsberichten der Deutschen Bundesbank Reihe 1, September 1988, Nr. 9, 'Bankenstatistik nach Bankgruppen', Hemmerling, Dresdner Bank Steuerung Firmenkunden, Frankfurt.

C. Comparative Interest Spread

	UK	Germany	Difference UK/Germany
Overdraft	4.06%	2.75 %	-1.31 Points
Fixed :			
Medium Term	2.56%	1.5%	-1.06 Points
Long Term	3.56%	2.50%	-1.06 Points

Note : in addition, spreads between best and worst customers in Germany for overdrafts are approximately 2.5 points, in the UK up to 5 points (A. Klemm, Director, Dresdner Bank, Braunschweig).

than that of the UK institutions. German banks have less recourse to interest protection against default than their UK counterparts. Because of this, German banks are more vulnerable to losses through default and must be more anxious to avoid the bankruptcy of their debtors.

The cause of the different interest spreads may lie in two factors : a different debtor clientele or discrimination against some debtors because of imperfect information. What is difficult to determine is the type of clientele the banks lend money to. While it is conceivable that German banks will restrict their lending to first rank customers, it is highly improbable. This type of action would restrict economic expansion and in the long run lower the prosperity of its citizens. There is no evidence with regard to this.

With regard to restrictive lending practices against some debtors, this accusation has been levelled against UK banks by Cable and Turner (1983). They hypothesise that cautious lending in the UK is the cause of many enterprises either not being able to start up or not being able to expand. Large spreads may be caused by imperfect information and which necessitates a higher degree of protection. If this is the case, small but healthy companies penalised by high interest rates may eventually find themselves in a difficult liquidity position, leading to their eventual liquidation. At the same time larger companies which receive funds on the basis of past successes may be allowed to borrow cheaply, though the ventures these funds are invested in are of dubious nature. The large differentials between German and UK lending spreads certainly merits further investigation in future financial research (Table 5-4).

5.4 SUMMARY

The purpose of this chapter was threefold :

1. To describe the legal mechanisms which apply when a company finds itself in an insolvent situation.
2. To look at the different ways in which creditors in both systems obtain information for the purpose of monitoring credit.
3. To show the ways in which creditors are protected from the default of their debtor.

There are some significant discrepancies between the two systems both in the legal framework and in the terms and monitoring of credit. The process of liquidation in the UK is primarily in the hands of creditors and based on procedures laid down in the common laws. Voluntary winding up appears to be more frequent than compulsory winding up through the courts. Legal intervention is restricted in line with the underlying philosophy that the insolvency of a debtor is the problem of the creditors alone. This allows the participating parties room to bargain with each other more or less freely. While secured creditors can insist on their priority ranking, unsecured creditors may delay the liquidation process, thus forcing the secured creditor to reconsider his inflexible position. The liquidation of a UK company may last several years with little or no payment made to either secured or unsecured creditor.

Bankruptcy in Germany, on the other hand, is usually regarded to be the end of a bargaining process. If a company has filed for bankruptcy, law-appointed officers take over the company affairs. The distribution of remaining assets occurs strictly on the basis of priority ranking with no mechanism for individual creditors' bargaining. The company is usually broken up and sold off within

two years, frequently even less, and the case is closed.

Credit monitoring, on the other hand, appears to be more intensive in Germany than in the UK. The law even promotes the acquisition of internal information and therefore facilitates the pre-bankruptcy bargaining process between the creditors. While financial creditors in Germany are more involved in the activities of their debtor company, UK creditors have a more distant relationship. The degree of security only plays a minor role in the pre-bankruptcy bargaining process. Overt insistence on securing assets by a financial creditor without showing evidence of the necessity to do so may result in countervailing pressure from two quarters, the Bundesbank and Government on the one hand and the trade unions and employee organisations on the other. The German banks, being controlled so closely themselves by their works councils and the Bundesbank, may thus find themselves in a very precarious position. Nevertheless, the evidence is that the banks tend to lose the least in a bankruptcy case.

Banks in the UK are generally secured lenders both long term and short term. Due to their strength, they are able to hold floating liens over the debtors' property with priority ranking. While their position prior to the debtor's insolvency is very strong, they may be forced to relinquish some of their claims when persuaded to agree to a reorganisation. Pre-insolvency monitoring does not appear to be as intensive for the financial institutions in the UK as it is in Germany.

Differences in the costs of credit and their adjustments for doubtful debtors are consistent with the above pattern. In the UK, the range in the cost of finance is wider than in Germany. This is not only evident in differences in the cost of equity, which are substantially larger than the cost of borrowing, but also in differences in the cost of borrowing. One explanation for this may

be the incomplete information on UK debtors as Cable and Turner (1983) claim. The effect of such large discrepancies in the financing cost must itself contribute to the higher insolvency rate in the UK.

It appears that the two systems differ mainly in the timing of their bargaining. While UK creditors try to cement their positions for the bargaining process after insolvency and then trade from a position of strength, German creditors bargain before the insolvency. The next chapter illustrates three examples in which, among other things, the differing bargaining processes and positions of the individual creditors in both countries are highlighted.

Notes:

(1) This fact can be surmised when looking at the recent trends of German bankruptcies. It has also been subject to an increasing number of articles in business magazines see for examples Franke (1984).

(2) 7323 reported cases of Creditors' Voluntary against 3859 reported cases of Compulsory Source : British Business 22 April 1988.

(3) See cases in Aries (1985)

(4) See The Cork Report, Cork Gully and Cooper & Lybrand 1982.

(5) See Tony Shea, CUBS Insolvency Lecture 20 January 1988.

(6) In our interview, Mr. Brettel of Cork Gully cited a recent and not unusual case where the break-up value came to £300,000 while the book value amounted to more than £2,000,000.

(7) Cork Gully Interview.

(8) One bank director from the Dresdner Bank described the scene as 'all hell breaking loose'.

(9) See Beton und Monierbau case.

(10) See Uhlenbruck, Klasmeyer and Kuebler (1977) and Delfmann (1984)

(11) The present system of reorganisation - Vergleich - does not force secured creditors to actively participate in the reorganisation.

(12) See HWWA (1984).

(13) See HWWA (1988).

(14) See Cable and Turner (1983), Stiglitz and Weiss (1981), Gerhard Clemenz (1986).

(15) For an extensive discussion on the effects of asymmetric information in this sense in the UK see Cable and Turner (1983).

(16) See IDS European Report 322, October 1988, p. 10

(17) For detailed study on the efficiency of German works councils see : Fitzroy and Kraft (1986), p. 493-504.

(18) Further details in the Quarterly Bulletin of the Bank of England, September 1984.

(19) this seems to be for administrative reasons only, source : D. Barrett, National Westminster Bank.

(20) The information in this section was the result of interviews with Mr. Barrett, Manager of the National Westminster Bank, London and Mr. Klemm, Regional Director of the Dresdner Bank, Braunschweig.

(21) Par value per share in Germany averages about 50 DM.

(22) The lending rates are approximate guidelines of the National Westminster Bank and are subject to negotiation between the borrower and lender.

SECTION III CASE STUDIES AND FINDINGS

CHAPTER 6 CASE STUDIES - BANKRUPTCIES AND RECEIVERSHIPS IN GERMANY

6.0 INTRODUCTION

The main aim of the case studies in this and the next chapter is to give examples of differences in the level and distribution of the losses through insolvency in the UK and Germany. These case studies also serve to illustrate the procedural differences of company insolvency in the two countries. As established previously, the distribution of the losses is a direct function of the legislative process which determines the bargaining positions and bargaining process of the creditors involved. The case studies describe the mechanism of creditors' negotiations both before and after insolvency, the role of the authorities, and other factors which affect the computation and distribution of bankruptcy costs.

Specifically, the cases demonstrate that the calculation of costs in the UK and Germany are different for the following reasons:

1. There are significant differences in the information available to the various groups of claimants.
2. The legal position between the groups of claimants, that is shareholders, financial and other creditors, management and employees varies between the two countries.
3. The bargaining process between the individual claimants differs between the two countries.

There are some similarities with regard to the legal priority rules of distribution of assets in bankruptcy.

The cases have not been randomly selected. They have been chosen on two criteria. First, to illustrate the different ways the problem of insolvency can be resolved within the two countries. Second, the cases relate to companies where a large amount of information is publicly available.

The cases are representative as vehicles for describing the events leading to the initial insolvency declaration, the subsequent administrative and legal procedures, and the interrelationships and relative power of the individual creditors of established companies in each country.

The cases are special in that they were not start-up companies. There was no fraudulent negligence involved on the part of the companies' management at the time the companies became insolvent. All the companies had limited liability status, i.e. either quoted on the stock exchange, as in the case of the UK companies, or Aktiengesellschaft (AG) as in the case of the German companies. It is conceivable that the financial creditor will put more effort into the rescue of a major client company than into that of a small trading organisation. It is also quite reasonable to assume that the funding available to larger companies to enable them to solve a temporary cash crisis is more plentiful and easier to come by than for their smaller counterpart. This applies in both countries. All selected companies operated in the area of construction or manufacturing and became insolvent in the last 10 years.

This chapter deals with insolvency cases in Germany. The companies selected for Germany are Beton- und Monierbau AG, a construction company, AEG-Telefunken AG, the electronics conglomerate and PHB Weserhuette AG, a manufacturer of customised heavy materials handling equipment. Beton- und Monierbau and PHB Weserhuette were broken up in bankruptcy while AEG-Telefunken was reorganised and is now a profitable company wholly owned by Daimler Benz.

The cases are presented in chronological order, describing the years leading up to the crisis, the various rescue attempts and the costs. For the companies Beton- und Monierbau and AEG, the insolvency was already recognisable more than 10 years prior to

their collapse. The company PHB-Weserhuette was liquidated within three years of its financial problem manifesting itself.

6.1 BETON- UND MONIERBAU AG

6.1.1 BACKGROUND

Beton- und Monierbau (B und M) AG was formally incorporated and started trading on the German stock exchanges on October 15, 1889 as the engineering construction company 'Actiengesellschaft fuer Monierbauten' with a capital of 1.5 million marks. Prior to this the company existed as G.A. Wayss & Co. in the form of a 'Kommanditgesellschaft', an unlimited liability company. The final company name 'Beton und Monierbau AG' was adopted in 1925. The main activities of the company traditionally centred around the construction of projects such as roads and bridges and industrial plant installations using steel and concrete construction methods.

In 1945 the company lost all its subsidiaries outside the Federal Republic and in 1949 it moved its headquarters to Dusseldorf. In the 1950's the company embarked on an ambitious expansion programme. One of its first post-war foreign subsidiaries 'Monier Construction Company (Nigeria) Ltd.' was established in 1957. Other subsidiaries followed in Austria (1964), Spain (1965) and Algeria (1974). The nominal value of share capital grew from 3.6 million marks in 1950 to 87.4 million marks in 1978. This was partly due to the increase in the share value from 61 marks in 1950 to 231 marks in 1978, accompanied in part by regular increases in share capital over the same period. Between 1948 and 1977 the company purchased over 340,000 million marks worth of assets (inclusive of divestures). By 1977 the company had managed to achieve a turnover of 882.5 million marks with more than 20,000 employees (1).

Despite the large turnover, the company rarely ranked among the more profitable construction companies in Germany. In 1966 the net profit after reserves and other deductions amounted to 2.3 million marks against a turnover of 276.7 million marks. Ten years later, in 1976 the turnover had more than doubled to 681.9 million while profits had dwindled to .2 million marks. After a turbulent 1978, the Dusseldorf Stock Exchange finally suspended share trading of Beton und Monierbau on 30.3.1979. The company filed for bankruptcy on 4.4.1979 after one financial institution started foreclosure procedures for outstanding amounts of some 10 million marks (2) and its 'Hausbank', Westdeutsche Landesbank, declined to make available further advances. Though the volume of construction and present orders amounted to more than 1 billion marks, the company made a loss of 25 million marks in its final year of operation in 1978 (3). Bad debt write-offs finally led the company into insolvency, though the situation had been precarious for quite a number of years. The financial data of the company for 6 years prior to its final collapse are shown in Table 6-1.

The most significant statistic in Table 6-1 appears to be the overall increase in export orders from 10% of total turnover in 1966 to 63.2% in 1977. In fact this figure increased even further in the following year. Total orders more than doubled during that period mainly from the Middle East. The net income which amounted to only 1% of total turnover in 1966, turned into a loss in 1977.

6.1.2 THE CRISIS YEARS

Between the 60's and its final collapse in 1979, Beton- und Monierbau had never really shown steady profitability even though its activities increased constantly and there was no shortage of orders. In 1969 the company counted as the 5th largest construction

TABLE 6-1 **FINANCIAL SUMMARY FOR BETON- UND MONIERBAU 1973 TO 1977**

in million DM

	1966(*)	1973	1974	1975	1976	1977
Turnover	276.7	617.6	616.3	623.4	681.9	880.9
Export (in %)	10.0	14.9	25.0	38.3	52.4	63.2
Orders	522.0	831.6	1317.2	1335.3	2298.8	1265.3
Net Income(**)	2.7	2.4	1.6	1.6	.2	-23.0
Employees	10,227	13,353	12,611	12,920	15,416	19,677

(*) estimated from Handbuch der deutschen Aktiengesellschaften, 1971, Verlag Hoppenstedt & Co., Darmstadt & Handelsblatt 4.4.1979
(**) Net Income before compulsory deductions and reserves
Source : Handbuch der deutschen Aktiengesellschaften, 1971, Verlag Hoppenstedt & Co., Darmstadt 1980

company in Germany. That year it had its worst year since existence with an operating loss of 21.4 million marks (4). This operating loss originated primarily in the Spanish subsidiary. In addition, the German building industry in the late 60's and early 70's went through a crisis with reduced economic activity, higher interest rates and the oil price shock.

The two largest shareholders of the company, the Commerzbank AG and the industrial giant Ruetgerswerke AG, decided in 1969 that a change in the company's management was in order. Each of the two shareholders owned more than 25% of the share capital (5). The new B und M chairman Hoppe started a programme of rigorous cost control in 1970 producing a small surplus at the end of that year. Between 1971 and 1973 the company looked increasingly to the Middle East and Africa to produce adequate profit margins without reducing the overall activities. Short term book profits in 1973 and 1975 were

produced primarily from building activities abroad. In 1976 the foreign activities increased to more than 50% of the total activities of the company. At the same time, the company increased its share capital by 25% but maintained its relatively low equity/total capital ratio of 11.4%.

The financial shareholder, Commerzbank, sold its holdings in 1972. The main shareholders emerged as Ruetgerswerke with a share holding of just short of 50% and the Westdeutsche Landesbank with 10%. The remaining capital was distributed among 400-500 small shareholders. In 1973/74 the German building industry experienced an overall reduction in activity of between 25 and 30%. Beton und Monierbau counteracted this reduction by increasing its activities in the Middle East with orders of 105 million marks in 1972 to 367 million marks in 1973 and to over 600 million marks in 1975/76 (6). The losses from German operations increased at that time from 11 million marks to about 18 million marks.

1976 marked the beginning of the company's end. Building activities increased in that year by 32%, yet the dividend of 4 marks per share could only be paid by dissolving a total of 23 million marks of reserves. Without this the company would have shown a deficit almost equal to the amount of the par value of the share capital - the legal requirement for filing for bankruptcy. The main shareholder, Ruetgerswerke, started to reduce its holding to less than 10%, selling its holding in the main to the Dutch group Ogem-Holding. Table 6-2 shows the ownership structure of Beton und Monierbau in 1977.

At year-end 1977 the company had to be bailed out for the first time. The state of Nordrhein-Westfalen gave a 70% guarantee for the loan of 100 million marks issued by the financial institutions in exchange for the security of 2500 jobs in the state and changes in the B und M management structure. In addition B und M handed over

TABLE 6-2 SHARE HOLDINGS IN BETON- UND MONIERBAU IN 1977

Shareholder	Share
Ogem-Holding	43%
Westdeutsche Landesbank	20%
Ruetgerwerke AG (less than)	10%
Other Shareholders	27%

Source : As estimated by Handelsblatt, 4.4.1979

the titles of the remaining freehold property it owned to its financial creditors. The chairman of B und M resigned a few weeks later after the resignation of the chairman of one of the major industrial shareholders, Ruetgerswerke (7).

Changes in the management structure did not prevent a new liquidity crisis developing in the summer of 1978. The banks now demanded and received an increase in share capital of 250% which was successfully issued as a rights issue under the lead of the Westdeutsche Landesbank on the Dusseldorf exchange. In addition the financial institutions insisted on a second guarantee by the state and the Federal Government for 50 million marks. When in January 1979 the new chairman of the B und M board died, the survival chances of the company diminished rapidly. Despite the precarious situation in B und M, the investment concern Dr. Amann Gruppe was persuaded in January 1979 to take over 20% of B und M's share capital for an estimated sum of 30 million marks (8). Ten days later the Frankfurter Allgemeine reported on intended strategies to bring the company back on a profitable footing and to cover the loss of 25 million marks in the previous year (9). The headquarters of B und M was sold and the workforce reduced by 1600. The measures were not enough to forestall panic on the stock exchange. On March 15, the share price slipped by 10% to 75 marks along with claims by the main shareholders that they were not responsible for the fall (10). On March 30, the Dusseldorf Stock Exchange suspended dealings in B und M since the operating losses showed losses in

excess of 28 million marks. On March 31, the Frankfurter Rundschau reported losses for B und M amounting to 200 million marks because of non-payment of contracts in Nigeria and Algeria. The financial picture is shown in Table 6-3.

TABLE 6-3 EQUITY AND DEBT DETAILS OF BETON- UND MONIERBAU ON 31.3.1979

Share capital	120 million DM
Loss Adjustment	200 million DM
Debt:	
Westdeutsche Landesbank	340 million DM
Genossenschafts Bank	250 million DM
Other	410 million DM
Total	1,320 million DM

Source : Frankfurter Rundschau 31.3.1979

On April 2, the Handelsblatt reported that the outstanding amounts from Algeria amounted to 70 million marks of which only one-half was collectable. The outstanding amounts from Nigeria of 45 million had to be written off by the company. In the next two days trade creditors and suppliers started to reclaim their property from building sites without waiting for the required court action. The foreclosure procedures by one of the company's financial creditors finally convinced the other creditors to force the company into bankruptcy. On April 4, the Westdeutsche Landesbank cancelled the credit lines for B und M. Later in the day the company filed for bankruptcy. At the time of filing the ownership structure of the company had changed approximately to that illustrated in Table 6-4.

It took the company more than six months to file a bankruptcy petition. In less than 2 months the courts accepted the petition

TABLE 6-4 OWNERSHIP STRUCTURE OF B U M ON 4.4.1979

Amman Gruppe	25%
Ogem-Holding	35%
Westdeutsche Landesbank	4%
800 Shareholders	36%

Source : see note 58

and appointed a liquidator (11). The creditors' meeting took place on 3.9.1979. The long time it took for the

company to take the final step, the significant changes in the ownership structure during the time of crisis, as well as the increased demands for asset security of the Westdeutsche Landesbank just prior to the fall led to some highly publicised court cases, discussed below. In addition, there were public accusations against the bank itself and subsequent intensive investigations by the public authorities into the power of the banks in general. No doubt, this general feeling was still very much in evidence when a second major company, AEG-Telefunken, announced its insolvency problems in 1982.

In many respects the Beton- und Monierbau bankruptcy is not a typical one. The company belonged among the largest publicly quoted companies in Germany, it had been unprofitable for over 20 years prior to its fall and it took the liquidator more than 8 years to put the company to rest. It serves, however, as an example of the role of the company's bank as creditor during its 10- year financial crisis and during the company's activities immediately prior to the fall. It also illustrates the bank's relationship with other creditors, shareholders and the state.

6.1.3 THE AFTERMATH

Less than one month after being appointed, the liquidator had established the size of the loss for the unsecured creditors and shareholders. While the latter lost all their investment, the unsecured creditors were able to recover a small percentage of their claims. The distribution of claims were estimated as shown in Table 6-5.

TABLE 6-5 DISTRIBUTION OF CLAIMS OF B U M

Total Claims	1.150 million DM
Assets	559 million
Assets Available for Secured Creditors	460 million
Assets Available for Unsecured Creditors	99 million
Net Loss to Creditors	591 million

Source : Die Zeit 7.9.79

While the secured creditors received more or less the full value of their claims, the unsecured creditors bore full burden of the missing 591 million marks. Trade creditors had insured against potential losses with the trade insurance company, Hermes Kreditversicherung AG, which estimated the total pay-out to amount to 40 million marks. State guarantees totalling 130 million marks given in the year prior to bankruptcy were called in by other creditors.

The fall of B und M marked the start of an 8-year legal battle between the unsecured individual creditors, small shareholders and government officials on the one side and the financial institutions on the other. The final outcome was a voluntary arrangement in 1987

between the liquidator and the Westdeutsche Landesbank, after the supreme court of West Germany had intervened twice in the affair (12).

About 70 smaller suppliers were endangered by the bankruptcy and had to apply for state help. The political upheaval sent the state minister of Nordrhein-Westfalen responsible for the state guarantee into early retirement (13). The opposition parties at the time, the CDU and CSU, also sought to establish the guilt of the SPD Chancellor Helmut Schmidt in the affair, and called for his resignation (14).

The positions of the creditors in Germany are fixed at the time of filing and the only changes in the priority ranking can be achieved in the courts. To do this the suing creditor / shareholder has to prove wilful deception of the accused party. Four major participants were involved in the various court cases and investigations, the 'Hausbank' or Westdeutsche Landesbank, the shareholders, the management board and the liquidator. The liquidator represented the other creditors but also the interests of the smaller shareholders. The court cases were as follows:

1. The 'Hausbank' Westdeutsche Landesbank was sued by the Association for the Protection of Shareholders, which represented the 800 small shareholders of B und M.
2. The liquidator sued the former management board of B und M.
3. The liquidator sued the Westdeutsche Landesbank.

In addition, the terms of the government guarantees were subject to an official investigation, particularly since it became apparent that the financial creditors had withheld a substantial payment to B und M of remission of 35 million marks from Saudi Arabia in January 1978, just before applying for the first state guarantee

for loans of 100 million marks (15). It also transpired in the investigation that the said 100 million marks had already been spent before it was paid out (16).

6.1.3.1 SMALL SHAREHOLDERS VERSUS WESTDEUTSCHE LANDESBANK

In July 1979, three months after application for bankruptcy, the Association for the Protection of Shareholders (Deutsche Schutzvereinigung fuer Aktieninhaber) intervened on behalf of the small B und M shareholders on three counts against the Westdeutsche Landesbank.

1. Beton und Monierbau had, on insistence of its financial creditor, made a rights issue of more than 60 million marks only five months prior to its demise. This led to suspicion of deliberately keeping the company alive solely in order that the bank could benefit from the new equity injection.
2. The Westdeutsche Landesbank had made several omissions in the prospectus for the issue (17).
3. The Westdeutsche Landesbank had reduced its holdings in B und M during the last year of the latter's operation from 20% of total share capital to about 4%. This reduction was the result of not participating in the new share issue.

The supervisory commission of the stock exchange rejected the accusations of insider trading against the bank in 1981 (18). Ten months later shareholders filed several civil suits against the bank. The bank had been the issuing bank in the rights issue 5 months prior to the company's bankruptcy. While it was able to persuade its customers and other shareholders to take up their rights, the bank itself refrained from exercising its options. The

case against the bank alleged that it unlawfully exploited its privileged position as financial advisor to the company to minimise its losses in the forthcoming liquidation at the expense of other creditors and shareholders (19). Three months later the Association announced that it had to withdraw its main case on the grounds that the cost of litigation, amounting to more than 12 million marks, was more than it could finance at the time. Eventually, the litigation continued. The courts recommended a compromise between the bank and the Association in which the bank paid one-half of the claimed damages, plus 6.5% interest, as well as the court costs of DM 3 million.

Another point of contention in the legal battle involved the prospectus published at the time of the rights issue. According to the German laws governing the stock exchanges, the Bank was responsible for the correctness of statements in the prospectus issued at the time (20). The shareholders claimed that the prospectus did not reflect the true financial position of B und M at the time of issue. The supreme court found in favour of the small shareholder in July 1982 and against the Westdeutsche Landesbank which was ordered to pay damages of DM 207,000 (21). However, the judgement was overturned in 1985 on appeal.

6.1.3.2 THE LIQUIDATOR VERSUS THE MANAGEMENT BOARD OF BETON- UND MONIERBAU

At the beginning of 1983, almost four years after the date of filing, the liquidator started proceedings against the management board of B und M on the grounds that the published financial statements of year end 1976 and year end 1977 contained serious errors and omissions. German company law puts the responsibility on published financial statements on the company management board. The court found in favour of the liquidator and five members of the

management board and six other individuals were ordered to pay damages between DM 54,000 and 315,000.

Penalties were imposed on four counts:

1. Errors in the aforementioned financial statements.
2. Participation in the sale of a large block of shares to the Dutch Ogden Group.
3. Securing a government guaranteed loan of 100 million in March 1978 without disclosing the true financial position of the company.
4. Securing a government guaranteed loan of DM 50 million in July 1978 without disclosing the true financial position of the company.

6.1.3.3 THE LIQUIDATOR VERSUS WESTDEUTSCHE LANDESBANK

By far the most important court case was brought by the liquidator against the Westdeutsche Landesbank. It was the first time that a financial creditor was publicly implicated in the bankruptcy of a major company and as such it constituted a test case for the investigation of the power of financial institutions.

In the initial bankruptcy documentation, the court appointed liquidator, lawyer Friedrich Metzeler, accused the Westdeutsche Landesbank of having deliberately delayed the actual filing of bankruptcy to gain time to withdraw as the prime unsecured lender of B und M. Between the summer of 1978 and the time of filing, the Westdeutsche Landesbank managed to convert 71 million marks of unsecured lending to the company into secured loans. When B und M filed, the bank was therefore able to take possession of the security outside of the bankruptcy proceedings. Metzeler claimed that the bank had prior knowledge of the state of affairs due the

fact that of one of its management board members held the position of assistant chief executive on the board of directors of B und M. On the basis of this knowledge, the bank should have initiated the bankruptcy process earlier. Failing to do so, the liquidator's argument continued, involved the bank in a criminal offence and entitled the unsecured creditors to regain the 71 million marks from the bank (22).

On 12.3.1981 the liquidator formally took the bank to court over the issue. The Amtsgericht (Magistrate Court) agreed that the liquidator had a right to the money on 2.7.1983. The bank won the appeal in the Oberlandesgericht (State Court) against this judgement three weeks later. At that stage the liquidator appealed to the Bundesgerichtshof (Supreme Court) in Wiesbaden. The Bundesgerichtshof repealed the judgement of the State Court and referred the case back to the Oberlandesgericht of Nordrhein--Westfalen. A second hearing of the case yielded the same result in the Oberlandesgericht, but the Bundesgericht referred the case back a second time. On 26.6.1987, more than 8 years after Beton und Monierbau had started liquidation proceedings and 2200 pages of documentation later, the bank finally agreed to an out of court settlement.

6.1.4 THE LOSSES

The case highlighted in public what had been privately regarded as common practice. The financial creditor, who is usually unsecured, will try to delay the bankruptcy process of its debtor until he has decreased his unsecured holding to a minimum. By having prior knowledge about the state of and an active role in the company affairs, he is able to minimise his risk at the expense of other creditors. Other creditors, such as large trade creditors, tend to insure against these losses either through a formal credit

insurance or through a lien on the assets advanced. This leaves small trade creditors and subcontractors as well as employees and state institutions to bear the brunt of the bankruptcy. Protection against the impact of their debtors' default is given by the state and or federal government which in turn finances these amounts through the fiscal system of taxation. In essence, it is the tax payer, i.e. the general public, who will pay the main bulk of company default.

In the case of B und M there were 15,000 unsecured creditors (23). The final losses were estimated as shown in Table 6-6.

TABLE 6-6 Losses suffered by creditors in bankruptcy FOR BETON- UND MONIERBAU AG

Share capital	120	million DM
Net debt claims	591	million
Liquidators' Cost (for unsecured creditors)	6.5	million
Liquidators' Fees (for Westdeutsche L. Bank)	5.3	million
Total	722.8	million

Sources :
Value of Share capital on 30.3.1979 in Frankfurter Rundschau 31.3.1979,

Net Debt Claims as per Die Zeit 7.9.1979,

Liquidators' Cost for unsecured creditors as per Frankfurter Rundschau 29.9.84 ,

for Westdeutsche Landesbank as part of the out-of-court settlement in Handelsblatt 20.5.1986 (59).

All but the loss of share capital of 120 million DM was borne in one form or other by the tax payer and insurers' associations. The financial creditor's loss amounted to 70 million DM as well as the 4 % of share capital he held at the time. The remainder was allocated to the general creditors. Due to insurance arrangements and state support, these creditors' losses could be minimised, allowing the creditors themselves to survive.

Not included in these figures were the loss to the state from increased unemployment pay-outs, the pension shortfall taken over by the pension insurance association, losses accrued to the Inland Revenue and Customs and Excise Authorities.

6.2 AEG-TELEFUNKEN AG

When AEG finally had to file formally for court protection in 1982, the discussions as to who was to pay for the survival and what form it should take took so long that the company came close to having to file in the bankruptcy court. The survival of the electronic giant AEG-Telefunken AG during its crisis years between 1978 and 1982 should never have really been in doubt. The central question in this case was whether the government of the Federal Republic would intervene directly by buying the share capital and run the company as a semi-state body, or whether only guarantees for capital injections should be given.

The cause of the insolvency problems of AEG can quite easily be pinpointed. It centred around poor management objectives and control and even worse control of management by the Board of Directors, who had left Management to their own devices for more

than 30 years. Only the imminent liquidity problems of the company and the spill-over effect on the West German banking system brought the realisation that a company as large as AEG could cause substantial losses to all creditors and particularly to its financial creditors. When the board finally intervened, the company had been ailing for more than a decade. However, the company could still be successfully reorganised for the following reasons :

1. AEG had a secure and growing product market.
2. The period of 1982/83 marked the end of the recession in Germany.
3. Both the financial creditors and the state had a strong interest in the survival of the company. Unlike the Beton- und Monierbau case, the rescue by the authorities was contingent upon the efforts of the financial and other creditors.

The latter arrangement was a direct result of the disproportionate losses accrued to the authorities in relation to the financial creditor. The references to the Beton and Monierbau case were quite explicit in the newspapers at the time.

6.2.1 - BACKGROUND TO 1974

6.2.1.1 FOUNDATION OF AEG

In 1893 the 'Deutsche Edison-Gesellschaft fuer Angewandte Electricitaet' (DEG) began the production of light bulbs with a capital of 5 million marks after having obtained the exclusive licensing right of the Edison patents for Germany. The company's founders and main financial backers were leading members of Germany's political and social scene under the leadership of Emil Rathenau. Four years later the company expanded its product range

to include electric motors and electricly operated machinery. The company's name changed to 'Allgemeine Electric Gesellschaft'. At the turn of the century the company diversified into car production ('Neue Automobile Gesellschaft'), typewriters, moving picture production technology and, together with Siemens, into telephone and telegraph technology ('Gesellschaft fuer drahtlose Telegraphie mbH, Telefunken'). Siemens' share was bought by AEG at the beginning of World War II.

6.2.1.2 EXPANSION AFTER 1945

With the partition of Germany in 1945, AEG lost 90% of its installations and production facilities. Prior to World War II, the company had employed 55,000 workers. After 1945 only 9,000 of these were left (24). The company moved its headquarters to Frankfurt and subsequently diversified into areas less directly connected with electricity such as general electronics, atom energy, semiconductors, information technology, consumer products (white and brown goods) and all aspects of entertainment electronics (25). In 1967, the entertainment subsidiary, Telefunken (formerly Telefunken GmbH) was fully integrated into the parent organisation and the company changed its name to AEG-Telefunken AG. When in 1961, the managing director retired, a time of uncontrolled expansion began. The highlight of this was to be the two joint ventures with Siemens, to form the nuclear power station supply company 'Kraftwerk Union AG' and 'Transformatoren Union AG' a transformer production subsidiary. The nuclear venture and its ensuing liabilities were to bring the company close to financial ruin. By the late 1970's AEG was represented in 155 countries and had 74 production and sales companies in 31 foreign countries. In Germany alone the company owned directly or indirectly a total of 37 plants.

6.2.1.3 FINANCIAL DEVELOPMENT AND FINANCING

Similarly to Beton- und Monierbau, AEG financed its expansion programme primarily with debt capital. While turnover between 1962 and 1974 increased by almost 470%, the amount of indebtedness increased even faster by 570% as shown in Table 6-7 (26). The share price during that time decreased from 424 DM to 54.50 DM per share. During 1974 the share price fell to just under 50.00 DM. By the end of the 60's the company had managed to become the third largest electronic concern in Europe, after GEC and Siemens.

TABLE 6-7 AEG 1962 - 1976 TURNOVER AND DEBT CAPITAL

YEAR	TURNOVER (in billion DM)	DEBT	SHARE PRICE (*) (in DM)
1962	3.25	1.41	424
1963	3.55	1.52	466
1964	4.00	1.52	591
1965	4.37	1.73	445
1966	4.86	2.05	293
1967	5.12	2.29	438
1968	5.43	2.42	252
1969	6.94	3.13	239
1970	8.44	4.14	160
1971	9.22	4.69	140
1972	9.86	5.59	148
1973	10.80	5.57	103
1974	12.00	6.68	54
1975	12.7	6.64	87
1976	13.50	7.10	83

(*) Year-End

Source : Wirtschaftwoche 23.7.82 and Handbuch der deutschen Aktiengesellschaften, 1971, Verlag Hoppenstedt & Co., Darmstadt, 1980

Newspapers reported investment in plant and equipment to be over budget by almost 100% between 1967 and 1971 (1.15 billion DM versus 2.21 billion DM). Purchases of subsidiaries exceeded the planned budget by a factor of 4. The expansion was financed by 80% with debt capital during this time (27).

6.2.1.4 EMPLOYEES AND DIRECTORS

The 9,000 employees of 1945 grew to 162,000 in 1975, when the company accounts showed a loss of almost 75 million marks against a turnover of 12.7 billion marks. The loss and the large indebtedness of the company finally led to some action by the company's creditor banks. Between 1960 and 1970, AEG was managed successively by no fewer than 6 managing directors each with a different emphasis where the company should concentrate. While one managing director favoured consumer products, the next would invest heavily in industrial plant, turbine production or nuclear power station installation. By 1975 the company sold a range which included toasters, televisions, trams, underground trains and electrical cables. In 1974 the creditor banks under the leadership of the Dresdner Bank decided that a new leadership with more stringent control over the company's activities was needed. The chairman of the Dresdner Bank, Juergen Ponto, took over as chairman of the Board of Directors (Aufsichtsrat) and installed as managing director Walter Cipa, who had successfully rescued the oil company Gelsenberg AG four years before. By 1975 AEG had been ailing for a number of years. The economic and political events of the 1970's had already made any internal form of rescue proposed by Cipa impossible.

6.2.1.5 SHAREHOLDERS

The American General Electronic Company had been the largest single shareholder of AEG owning 25% of the share capital since the 1920's. While GEC had many contractual technology ties with AEG, these became less important at the time AEG turned increasingly to consumer electronics in the late 60's. GEC started to reduce its share holdings in AEG during that time and it finally sold the last 10% in 1974 to a German banking consortium. From 1974 onwards, the banks invested increasingly into AEG shares until, in 1982, they collectively held more than 50% of the total share capital.

6.2.2 THE CRISIS YEARS 1974 - 1982

It is impossible to pinpoint the exact time when the crisis in AEG started. Unlike Beton- and Monierbau, there was little erosion of product markets, though the market in electrical consumer goods in the 70's did not expand at the same rate as in the 60's. There was relatively little competition in the original industrial product lines and the contraction of the German economy had much less effect on the electronics industry than it had on the building industry. The electrical components industry survived the 1970's recession quite well, with the exception of AEG. Siemens AG, Germany's largest electronic company not only survived totally unscathed but also managed, at the height of the recession, to make a profit of 504 million marks on a turnover of 17 billion marks. In the same year, 1974, AEG showed its first substantial loss. Poor direction and wrong strategies had left AEG in a situation where it had no product or even cost control systems and owned a large range of well made but technologically obsolete products. The typewriter subsidiary, Olympia, is an example of this. While all competitors had changed over, first to electric typewriters and then to word processors and computer manufacturing, Olympia's

product range only included the most basic technology in typewriter manufacturing.

Walter Cipa's main task in 1975 was to bring order into the company's product lines and devise an effective system of cost control. Centralisation of corporate control together with the sale of money loosing operations was to bring the company back to profitability. Unfortunately in 1977, still at the start of the rescue program the managing director of the Dresdner Bank Juergen Ponto, the main financial backer of Cipa, was assassinated. When two years later the second backer of Cipa, the managing director of the Deutsche Bank died, Cipa lost his main support for his reorganisation plans. Without the support of the two bankers, Cipa lost the goodwill of his employees and the unions now began actively to oppose his strategies. In 1979 Cipa resigned from his post.

The successor of the Dresdner Bank's managing director Hans Friedrichs, the former Free Democrat minister of finance in the Social Democrat/Free Democrat coalition cabinet and an ardent free marketeer, was reluctant to take over Ponto's role. The rescue of AEG was, as Friedrichs described it, a 'hobby' of his predecessor. He was finally forced to take an active interest in the case in 1979 when the company's position deteriorated to such a degree that the imminent insolvency was to have severe repercussion on the German banking system as a whole. At that time the high degree of financial involvement began to be closely monitored by the German Central Bank and the Credit Supervisory Board (28). By the year end of 1979 the German banks were said to have reached the limit of their permitted financial credit involvement and the regional Central Banks (Landesbanken) were forced to advance the funds necessary to cover the accumulated losses of AEG. How close the banks were to a financial crisis was never exactly revealed. When the credit supervisory board and the state banks started to issue

official directives and guidelines in that matter in 1979 there was strong suspicion that the German banking system was likely to be affected by the bankruptcy of AEG (29).

Between 1975 and 1979 Water Cipa restructured the management board and initiated the sale of major product lines. Among them, AEG's share in the original product, the light bulb trading under the name Osram was sold to Siemens, the 20% share in Zanussi, the washing machine manufacturer, was sold off to the major shareholder of the company, Zanussi Italy, and the profitable computer company 'Computergesellschaft Konstanz' was also handed over to Siemens (30). Kraftwerk Union, the money-losing nuclear plant construction company was also sold to Siemens in 1976 for 600 million marks, with the contractual obligation that AEG was to remain responsible for its share of the losses of the venture resulting from the pre-1976 time. All in all these losses amounted to 1.7 billion marks until 1979 (31) and the creditor banks were forced to write off this loss indirectly through a financial restructuring programme in 1979. Table 6-8 shows the financial position of AEG between 1976 and 1982.

TABLE 6-8 FINANCIAL POSITION OF AEG 1976 - 1982

	1976	1977	1978	1979	1980	1981	1982
Turnover in bil DM	13.5	14.3	14.1	14.2	15.1	14.8	13.3
Export in %	44	49	46	43	42	43	43
Orders in bil DM	14.7	14.4	14.5	14.2	14.4	15.4	13.3
Profit in mil DM	397	8	-347	-967	-278	24	-85
Share Capital (in mil DM)	930	930	930	620	620	620	620
Share Price in DM	82.9	85.5	77	37	76	44	28.1
Employees in 000	162	158	163	154	136	124	93

Note : The yearly turnover and orders are not directly comparable due to sales/and or consolidations of various subsidiaries during that period.

Source : Handbuch der deutschen Aktiengesellschaften (Darmstadt), Verlag Hoppenstedt, 1979/83

6.2.3 THE FIRST RESCUE OF 1979

In 1978 AEG incurred losses amounting to close to 400 million marks. Only a decrease of pension reserves in that year reduced the figure to 347 million marks. By mid-1979 the company's net losses for that year were forecast to exceed the share capital by the end of the year. With no reserves to reduce the losses this meant that the legal requirement of filing for bankruptcy would come into force. The company owed 7 billion marks worldwide with some of accumulated losses from the former subsidiary Kraftwerk Union still to be paid. The main creditors in 1979 were the German banks. In October 1979 the German government offered to rescue the electronic giant. The rescue offer of the government was to have severe strings attached for the banking consortium with the Beton- und Monierbau rescue being cited as example for the banks avoiding their responsibility. In addition, the chairman of AEG's 'Hausbank', Hans Friedrichs of the Dresdner Bank, was against state involvement in the rescue as a matter of principle.

Compared to the AEG, the competitor Siemens had its best year ever in 1978 with a turnover of 29 billion marks and profits amounting to 721 million marks. In 1979 the figures were only slightly down. Siemens turnover decreased by 3% with profits dropping by 5%.

By the end of November, only weeks before the bankruptcy requirement was to come into force, the banks agreed to restructure AEG's capital, in four steps (32).

1. The share capital was to be written down from 930 to 310 million marks.
2. A new rights issue of 310 million marks nominal was to be made at 300 per cent of par value. The nominal value of shares thus increased by 310 million marks at a the

market premium of 100 DM per share injecting 930 million marks into the company. The issue was to be taken up entirely by the consortium banks.

3. An additional debenture note of 100 million marks was to be taken up by a consortium of 20 insurance companies.
4. Long term debt of 2 billion marks for 8 years was restructured. The costs to the banks was estimated to amount to 200 million marks (33).

The reorganisation was approved at the shareholders' meeting in January 1980. The immediate loss to the shareholders and creditors was to be as follows :

Loss in share value (par)	620 million marks
Interest remission	200 million marks
Total Cost	820 million marks

The long term loss for the banks was to be much greater since the shares, issued at 150 marks (3 time par value of 50 marks) lost its value almost when issued. The price of the shares at year-end 1980 stood at 76 marks per share. At the end of 1982 the shares were traded at 28 marks per share.

The banking consortium which took up the rights issue at a cost of 930 million marks consisted in total of 160 German and foreign banks including 5 state central banks. The three largest banks took more than 40% of the issue (Table 6-9). The banks now owned more than 50% of the total share capital. Some small holding were held by other industrial companies notably by Daimler-Benz AG (since 1981) with about 180 000 small shareholders holding the remainder. As the new managing director the Dresdner Bank appointed Heinz Duerr, a managing director and owner of a medium sized company in the south west. The main reason for this choice appeared to be his

TABLE 6-9 AEG - RIGHTS ISSUE DISTRIBUTION, SHARE OWNERSHIP AND LOANS OF FINANCIAL CREDITORS

	Rights Issue nominal 310 mill. DM		Shareownership of nominal 620 mill. DM	Loans (*) of 3 bil DM
	Total	in %	in %	in %
Dresdner Bank	195 million	21%	10.75%	17.45%
Deutsche Bank	140 million	15%	7.5%	12.46%
Commerzbank	74 million	8%	4%	9.55%
BHF-Bank	56 million	6%	3%	3.18%
Westdeutsche Landesbank	88 million	9.5%	4.75%	12.19%
Other State Banks	191 million	20.5%	12.25%	30.02%
Other Banks	176 million	20%	8.23%	15.15%
Total	920 million	100%	50.48%	100.00%

* Of these loans about 86% were secured through liens on property see Annual Reports 1978/79.

Note : A consortium consisting of all major insurance companies and 30 industrial companies advanced a total of 460 million marks to AEG in form of a debenture. Among the industrial companies involved were the competitors Siemens and Bosch AG, as well as Daimler-Benz, BASF and Hoesch.

Source : Sueddeutsche Zeitung 12.8.1982

experience in negotiations with the unions, who had to agree to future restructuring plans (34).

6.2.4 THE OFFICIAL REORGANISATION OF 1982 (DER VERGLEICH)

The new funds in January 1980 barely enabled AEG to pay its existing accumulated losses. The rationalisation expenses, which included large amounts of redundancy and early retirement payments, amounted to 200 million marks alone. The future plan of AEG included an even more drastic reduction of the workforce though some of this reduction was planned to be incorporated in the sale of some AEG subsidiaries.

Heinz Duerr's restructuring concept backed by the banking consortium centred around three main areas :

1. Decentralisation of the management structure which had just undergone a centralisation programme under the previous managing director.
2. Cooperation and/or participation agreements for subsidiaries with other companies. This in effect amounted to AEG selling part of their subsidiary network.
3. More production transferred outside of Germany into low cost production countries (35).

Considering that the rescue of 1979/80 by the banks only provided capital for accumulated deficits but made no provisions for the cost of the new concept, the prospects for success were dim. The deterioration of the financial position following the first rescue attempt was attributed to the recession in the German economy. The new chairman's report on the second shareholders' meeting in June of 1980 spoke confidently about the success of the restructuring programme. Orders increased by 7% and turnover by 5% for 1980. The losses expected during that year were estimated to amount to 100 million marks.

TABLE 6-10 AEG - FINANCIAL RESULTS 1981

Estimated Operating Loss	650 million DM
less :	
Sale of Subsidiaries	410 million
Net Loss	240 million

Source : FAZ 30.10.81

In May 1981 the losses announced for 1980 totalled twice that amount with an additional 600 million marks falling due as repayment of loans and advances. With a nominal share capital of only 610 million marks and no reserves AEG was in the same situation as before (36). In October 1981 the banking consortium

agreed to inject more capital into the company in form of interest remission totalling 240 million marks. For 1981 the total loss to the company was estimated to be 650 million DM though the sales of subsidiaries brought an additional amount of funds of 410 million (37). Further advances by the banks including the state central banks (Landesbanken) to secure production of orders followed. In 1981 AEG showed a small profit of 34 million which included the interest remission of 240 million and the sale of assets as shown above.

In November 1981 AEG finally asked for federal help to guarantee funds for three export orders totalling 1.5 billion marks. The cash flow position was precarious and work on these orders could not commence without additional financing. At that time the company had 2 billion marks worth of fixed assets against 3.5 billion marks of long term loans. The banks were unable to make further advances without such guarantee. The federal government ordered an independent report on whether the company should be allowed to survive in principle. Six months later in June 1982, the estimated operating losses for the current year were still running at 650 million mark. Since the federal government could not decide on a long term rescue commitment the company was being funded on a month to month basis. A direct state participation for AEG was rejected by the government. The main obstacle of the state rescue was the form it should take. The government insisted that government money was only to be paid out after the banks advanced an additional 260 million marks. The political row which had followed the attempted state rescue of Beton und Monierbau AG undoubtedly influenced the decision of the government.

While the banks and the government argued over the terms of the rescue, the financial position of AEG had deteriorated by the beginning of August 1982 to the point, that company law required it to call a shareholders' meeting to inform them of the state of

TABLE 6-11 AEG - BANKING INVOLVEMENT
in million DM

Cash Advances by banks

	Year End 1979	Sept. 1981
Dresdner Bank	190	800
Deutsche Bank	140	540
Commerzbank	72	390
BHF Bank	55	70
State Banks :		
Westdeutsche Landesbank	88	390
Hessische Landesbank	51	240
Bayrische Landesbank	39	220
Norddeutsche Landesbank	35	210
Wuerttemberg Landesbank	39	130
Hamburgische Landesbank	23	60
Total	732	3020

Source :Der Spiegel 2.11.1981

over-indebtedness (Ueberschuldung). Before the shareholders' meeting, however, could take place, the company's management was forced to apply to the courts for a composition order (Vergleich) on 10.8.82. The composition proceedings were opened on 31.10.82. The deadline for agreement of creditors was set by the courts to be 9.3.1983.

The company had become illiquid and was in need of protection against creditors. At the time of application, AEG owed moneys for goods and services from around 20,000 to 30,000 trade creditors of which the smaller ones were at risk. As an immediate measure and to ensure their survival the individual states released emergency funds of almost 100 million marks. Total indebtedness of AEG amounted to 7.2 billion marks of which 1.3 billion were secured by plants and other property (38).

By September, the assessors of the independent report commissioned by the government had concluded that the state rescue of the

company should be proceeded with. Their arguments centred around four points :

1. The product range of the company was or could be made profitable.
2. The amount of associated follow-up bankruptcies were estimated to be over 5,000 with a volume of 5 billion marks.
3. The competition in the markets of communication, transport and energy would be greatly reduced by the bankruptcy of the Company - the consumer would suffer.
4. The bankruptcy would affect the overall trust in the German economy.

Source : VDW Finanz- und Wirschaftspiegel 2.9.82

On the strength of this report the federal government undertook to guarantee a direct loan of 1.1 billion marks which was to have preferred status and an export guarantee of 600 million marks. The banks advanced an additional 1.1 billion marks subordinate to the federal loan guarantee. The total cash available to AEG amounted to 2.8 billion marks.

The central recommendation of the composition agreement was an immediate write-off of 60% of all claims over 10,000 Marks by the company's creditors. The composition of creditors at the time was as shown in Table 6-12.

On 9.3.83 the composition was agreed by 99% of all creditors. Only 300 creditors were present at the meeting against expectations of several thousand. The composition order was to last until 18.9.1984.

TABLE 6-12 COMPOSITION OF CREDITORS OF AEG ON AUGUST 10, 1982 (in total numbers)

Small Trade Creditors	11,900
Large Trade Creditors	1,400
Financial Creditors	41
Pension Creditors (*)	27,000
Others	55,000

* Pension Creditors were represented by the Pension Insurance Association (Pensions Sicherungs Verein) which insures the pension claims of 2 million pensioners and 3.2 million employees. As a result of the agreed 60% write-off of pension claims the Association which was liable for the shortfall had to increase its subscription fees of the 34,000 member firms from .2% to .69%

Source : FAZ 8.3.83 and Hamburger Abendblatt 18.11.82

The composition agreement probably headed off a crisis in the German banking system. No balance sheet provisions for bad debt had been made by the banks until 1982. This was seen to be the major reason why the banks had been instrumental in the survival of AEG since 1979 (39). As a result of their own difficulties, the banks were very active and successful in persuading almost all major German corporations to participate in the rescue at various stages through loans and equity participation.

6.2.5 THE LOSSES

The total losses from the composition agreement for creditors amounted to 4 billion marks excluding unemployment payment for the workforce made redundant and tax losses. The banks carried the major part of these losses with a total of 1.6 billion marks. Since the share capital remained the same, there was no immediate nominal loss to the shareholders. The banks, however, wrote off more than

800 million marks of share premia. The share value of AEG fell from the original issue value of 150.00 DM in 1979 to around 27.00 DM at the time of the composition order (40).

The details of the distribution of the losses is shown in Table 6-13. The banks' share of the total loss came to just under 2 billion marks while the Pension Insurance Association had to carry almost 40% of the total cost. An additional problem for the Association was to be the contingency of this composition agreement. When the rescue finally succeeded in 1984/85, the liability of the Association extended for another 10 to 20 years, as a result of a judgement from the courts in 1987. This added an additional 250 million marks to the Associations total losses (41).

TABLE 6-13 AEG - DISTRIBUTION OF LOSSES FROM THE COMPOSITION AGREEMENT
in billion DM

Banking Consortium	1.600	billion
Lost Interests	.300	billion
General Creditors	.450	billion
Pension Association	1.600	billion
Additional Liability (*)	.250	billion
Court Costs	.018	billion
Administrators' Cost (**)	.006	billion
Total	4.224	billion

(*) see Handelsblatt 6.10.87
(**) estimated

Source : Frankfurter Rundschau 15.9.84

Three major items are not included in the above estimate.

1. The 930 million mark capital injection in form of equity by the banks which had to be written off for the most

part as well as the loss accruing to the 180,000 general shareholders who had to reduce their holdings by two-thirds at the first rescue attempt in 1979.

2. The increased unemployment payments by the government due to the reduction in the workforce from 90,000 to little over 60,000 (Germany only). The majority of the 30,000, however,retained their jobs as being part of the subsidiary sold.
3. The state help for smaller suppliers which faced insolvency on account of the composition agreement. This help costs the various federal states probably more than 100 million marks (42).

The cost of the restructure amounted to almost 60% of the total capitalisation of AEG in 1981. The loss was borne this time exclusively by the creditors of the company and by the taxpayer. The cost of an AEG bankruptcy would have left creditors with less than 20 pfennig in the mark. In addition, it would have resulted in an estimated increase in unemployment of 40,000 people, larger redundancy claims against the state and the total loss of share capital. Additional costs to the taxpayer would have accrued through the banking crisis which was said to have ensued (43).

6.2.6 THE RECOVERY

Following the composition order and court protection AEG was able to undertake a series of measures immediately, which would have otherwise required lengthy negotiation with various groups, namely those of employee representatives and the individual members of the banking consortium, some of whom were only too anxious to write off their commitment altogether.

The whole business of electric motor engineering was sold. In the semiconductor sector, joint venture agreements were arranged with United Technologies and Diehl. This resulted in the substantial investment and development cost to be shared. The French group Thomson-Brandt S.A. bought 75% of the consumer electronic subsidiary Telefunken Fernseh- und Rundfunk GmbH. Between 1981 and 1984 the total number of employees were reduced by more than 60,000 from 136,000 to 74,000. Total turnover during that time fell by 17%. When the composition agreement expired in 1984 AEG was able to pay off its the bank loans of 1.1 billion marks and its obligations to the general creditors of 350 millions marks. The federal guarantee was not taken up since the financial position improved in 1983.

In 1983 the company produced its first profit for almost 10 years totalling 37 million marks. This was due to lower interest liabilities accruing from the 60% write-off of creditors claims and also due to extraordinary income from the sale of subsidiaries. The 1984 results amounted to 396 million marks for the same reasons. Between 1985 and 1987 the net income was shown to be zero. Income before taxes and extraordinary deduction showed a surplus of more than 50 million with an upward trend. According to newspaper reports the profits in 1988 amounted to 27 million marks from a turnover of 13.4 billion marks. In 1989, the company announced a dividend to its free shareholders for the first time since 1974 (44). The number of employees increased again to 87,000 during 1988.

The car manufacturer Daimler-Benz AG has held a small equity stake in AEG since 1981. In 1985 Daimler-Benz bought shares from the banking consortium and on the open market owning a total of 24.9%. At the same time it applied to the monopolies commission (Kartellamt) for permission to increase its holdings further.

TABLE 6-14 FINANCIAL RESULTS OF AEG 1983 - 1987
in million DM

	1983	1984	1985	1986	1987
Turnover	11,527	11,015	10,843	11,220	11,600
Export (in %)	45	45	45	43	40
Orders	11,089	11,122	11,278	12,115	12,091
Net Income	37	398	0	0	0
Employees	76,600	73,760	73,760	78,200	80,499
Share Price (in DM)	80.4	102.5	240.9	328	189.1

Source : Handbuch der Aktiengesellschaft, 1988, Verlag Hoppenstedt, Darmstadt

In the beginning of 1986 the monopolies commission granted permission with certain conditions attached. The banking consortium was able to dispose of its entire share holding leaving Daimler-Benz with a majority holding in AEG of 56%. The shares changed hand at an estimated price of 170.00 marks in October 1985 (45). The banks had been able to write off the share value to the value at the time of composition agreement from 150.00 marks to 27.00 marks. The Daimler-Benz offer allowed them to recouperate all of their book losses. In 1988 the company submitted a bid to the remaining shareholders offering one Daimler shares for five AEG share. By September 1988 the car manufacturer owned 80% of the share capital of AEG. Under the terms of agreement AEG will not pay any dividends to its majority shareholder until 1992. The accumulated tax losses of 1.5 billion marks can be carried forward until that date and payment of dividends would result in the loss of the tax advantage. The implicit cost of the tax loss to the taxpayer is estimated to amount to 900 million marks (46).

6.3 PHB WESERHUETTE AG

The company PHB Weserhuette was a result of a merger of two privately held companies. Each had been established as limited liability companies well before the turn of the century and had been very successful before their merger in 1980. Problems arose through growth strategies of the new owners, the long-winded and bitter struggle for control of PHW in 1984 between the two major owners, the privately held Wolff Group and the publicly quoted steel giant Hoesch and the subsequent inability of the winner Wolff to inject sufficient equity capital for the ambitious strategies pursued. What had been two very profitable companies in 1978, turned into one loss making company in 1986 which finally filed for bankruptcy on 30.12.1987 (47).

The merged company, despite being Europe's biggest builder of heavy materials handling equipment and facing a growing worldwide market, had become so vulnerable with its low equity base that the demise of one its French joint venture partners in 1985 caused the fall of the entire company.

6.3.1 THE BACKGROUND

The company PHB Weserhuette AG was formed in 1979/80 as a result of a merger between the subsidiaries Pohlig-Heckel-Bleichert (PHB) of the steel producer Arbed-Saarstahl and Weserhuette belonging to the medium-sized engineering and trading conglomerate Otto Wolff AG. Pohlig-Heckel-Bleichert was involved in the design and manufacture of heavy materials handling equipment. The company was founded in 1874 as PHB Vereinigte Maschinenfabriken AG and concentrated on the manufacture of custom designed conveyors and other mechanical handling equipment. Weserhuette AG produced primarily equipment for the mining industry. Both companies'

product lines complemented each other. The ownership of the merged company left the original owners Arbed-Stahl and the Wolff Group each with 49.94% of the total share capital of 30 million marks with the remaining 1.2% being owned by small shareholders.

About 70% of the activities of the newly merged companies accrued in the German parent company while the remainder was earned in the subsidiaries.

The new chairman of the merged company Peter Jungen had served 15 years under the chairman and owner of the Otto Wolff Group, Otto Wolff von Amerongen. Within four years as chairman of PHB, Jungen increased world wide group turnover by more than 75%, from 671 million marks in 1979 to 1,180 million marks in 1983. During that period the parent company's turnover, (Group less subsidiaries worldwide) increased by only 30% from 463 million marks to 610 million marks during that time. Total capital employed for the parent company rose by 25% from just under 360 million marks to almost 450 million marks. No new equity capital was issued between 1979 and 1983 and total equity capital (inclusive of revenue and capital reserves) remained more or less the same during that period with the exception of a one- time increase during 1980. (Table 6-15 Financial Data of PHB Weserhuette 1979-1983).

In 1980 PHB Group employed 7,000 people worldwide of which 1,000 were qualified engineers. By 1983 the number of employees was reduced to 6,000. The share of total employees of the company was approximately one-half that of the group.

Apart from expanding at a faster pace than both companies - in particular the original PHB - were used to, the field of expansion became much wider. The company which had been relative passive before 1979, was now actively seeking acquisitions on a worldwide scale. The centre of concentration was France. In 1984 PHB took

TABLE 6-15 FINANCIAL DATA OF PHB WESERHUETTE GROUP AND PARENT COMPANY 1979 - 1983

	1979	1980	1981	1982	1983
PHB Group :					
Turnover (in million DM)	680	819	961	1180	1162
Orders (in million DM)	769	957	1232	975	978
Employees	6500	7000	7000	7000	6000
Company (AG):					
Turnover (in million DM)	463	437	447	611	610
Orders (in million DM)	443	507	687	449	528
Net Income (in million DM)	3.7	2.2	2.2	2.3	2.6
Employees	3400	3500	3500	3500	3300
Total Capital employed (in million DM)	357	391	449	462	446
Total Equity(*) (in million DM)	63.3	71.5	72.6	70.5	73.0

(*) Total equity includes the par value of share of 30 million marks and reserves but excludes reserves for pensions and similar. Note that the increase in total equity was due to an increase in reserves during 1980.

over the materials handling company Delattre-Levivier, a subsidiary of and supplier to Creusot-Loire, one of France's largest engineering company.

However, Creusot-Loire in turn was owned by the Schneider conglomerate. Creusot-Loire had been in financial difficulties which became more pressing during 1984. When the parent company Schneider refused to fund the losses of its subsidiary any longer without French Government help, Creusot- Loire was liquidated by court order in December 1984. Not only was this the largest insolvency case ever dealt with in France, its subsidiary

Delattre-Levivier also lost its only customer over-night (48).

The second, and probably the more significant, problem for PHB Weserhuette occurred when one of its owners, Arbed-Saarstahl had to divest itself from its PHB shares. The recession of 1979/82 had forced Arbed like most German steel manufacturers,
to apply for government help. As part of the government rescue agreement Arbed had to sell its shares in PHB Weserhuette. The steel company Hoesch AG offered to buy the shares which had a par value of less than 15 million marks for a total of 53 million marks. According to the financial press problems in the partnership of Wolff/Hoesch arose on two fronts :

1. Hoesch wanted to amalgamate PHW Weserhuette with its own subsidiary Orenstein & Koppel thus giving Hoesch more power in the joint venture than Wolff.
2. The Wolff Group, owner of 49.9% of the PHB Weserhuette, wanted to buy the share packet from Arbed Saarstahl. As a privately held group with limited access to further equity capital its chairman Otto Wolff von Amerongen had problems raising the amount entirely from private resource.

Prior to the acceptance of the Hoesch offer, Wolff and Arbed had commissioned an independent valuation from Arthur Andersen. The valuation led to strong disagreements between the Wolff, who needed a low price, and Andersen and in turn Arbed Saarstahl whose creditors wanted the maximum price achievable (49).

Wolff's main efforts during 1983/84 and those of his senior managers of PHB Weserhuette concentrated on ousting Hoesch delegates from the Board of Directors of the PHB Weserhuette and to fight the sale of the share packet to Hoesch in the courts. While Hoesch signed the sales agreement with Arbed Saarstahl and

waited for the approval from the mergers and monopolies commission, Wolff managed to persuade some of the remaining small shareholders to part with their shares. By the time Hoesch had officially acquired the 49.9% of PHB Weserhuette Wolff owned more than 50% of its share capital. A cooperation between the two companies became impossible with Wolff managing to hold all seats on the Board of the Directors apart from those allocated to the worker' representatives (50% less one seat). Finally in July 1985 the giant Hoesch conceded defeat. It agreed to sell its shares to Wolff for a total of 60 million marks. As reasons for this sales Hoesch named (50):

1. no voice on the board and therefore no influence on management decisions, and
2. disagreement with the company's policy of foreign expansion. The foreign business activities of the group amounted to more than 81% in 1984 (51).

The only concession Hoesch insisted on was an option on the share packet if it were ever to come up for sale. In order to finance the takeover, Wolff signed an agreement with the Aachener and Muenchener Insurance company to buy from him 25% of the total shares. Though technically a shareholder, the insurance company secured its holding in form of a debenture with priority claim.

6.3.2 THE CRISIS YEARS

The fight for control of PHB Weserhuette had taken on the character of a personal feud rather than a commercially motivated take-over during 1984/85. The financial press during that time was more aware of the financial implications for PHB Weserhuette than the major shareholder appeared to have been himself. The Handelsblatt in August 1984 talked of a Phyrric victory for Wolff and warned that Otto Wolff might find himself in a vulnerable position if the

company needed further capital to expand (52). Furthermore, the public row between Otto Wolff and Detlev Rohwedder, managing director of Hoesch, was said to damage the credibility and goodwill of the beleaguered company.

Less than one year after Wolff had gained control of PHB Weserhuette, the company ran into financial difficulties with its French and overseas' subsidiaries. In addition, the managing director of Weserhuette, Peter Jungen, fell out with Otto Wolff von Amerongen, the managing director of Otto Wolff AG, over personal disagreements and left in November 1986. During the struggle for control the management and the directors had neglected to exercise financial control over the mainly decentralised subsidiaries with the result, that the construction of a small steel works in Texas was able to incur losses of more than 250 million marks. Other installations in South America were running at a loss of more than 40 million marks (53).

When finally the results of the French subsidiaries, Delattre and Someral, showed a loss of more than 60 million marks the company was unable to survive any longer without capital injection. The Wolff AG had to advance the money to cover the losses (54). At the same time Otto Wolff accused his former managing director of negligence for the French loss. At the shareholders' meeting in May of 1987 the Board of Directors of PHB Weserhuette, which consisted mainly of nominees appointed by Otto Wolff, refused to give its former managing director the customary clearance (Entlastung) holding Jungen directly responsible for the loss. The losses from the subsidiaries amounted to 75 million marks which transformed the surplus of the year for the unconsolidated company (AG) to a loss of 34 million marks (see Table 6-16).

While there was no doubt that irregularities had occurred in the French subsidiary, the main reason for the losses could be ascribed

TABLE 6-16 PHB WESERHUETTE - FINANCIAL RESULTS 1984 - 1986
in million DM

	1984	1985	1986
Group :			
Turnover Group	972	870	992
Company:			
Turnover	466	362	479
Orders	383	455	NA
Net Profit	2.6	.25	-34
Total Capital Employed	417	452	449
Total Equity	74	74	60.3
Employees (year-end)	3000	2797	NA

Source : Handbuch der Deutschen Aktiengesellschaften 1984-87
Verlag Hoppenstedt, Darmstadt

to the lack of control at the time. For one, there appeared to have been no provision for losses made for the French subsidiary Delattre when Creusot-Loire went into bankruptcy. For the other, the managers of the French subsidiary Someral and of the Austrian subsidiary had been allowed to run their company without much guidance or control from the parent. Total losses from these subsidiaries were estimated to be around 128 million at the shareholders' meeting but only 6 million marks could be attributed directly to fraud (55).

In an effort to put the company on a more stable footing, Otto Wolff increased the equity capital of PHB Weserhuette by 20 million marks to a total of 50 million marks. The minority shareholder Aachener und Muenchener Versicherungsgesellschaft participated in the share increase under the same terms as before.

The relatively small increase in equity was insufficient considering the losses incurred. The majority shareholder, Otto Wolff AG, itself was experiencing financial problems. Disagreements within the Wolff family - some of its members feared that any further financial commitment to PHB Weserhuette would endanger their own holdings - led to the decision by Otto Wolff von Amerongen to cut his losses in the PHB Weserhuette subsidiary. In October 1987 Wolff announced that he was unable to support Weserhuette any further. The banks declined to help when it was revealed at a creditors meeting that PHB Weserhuette had operating losses of 130 million marks in 1987 and a further 26 million in 1988. The shares of the company were offered to the ousted shareholder Hoesch AG which still held the option. On October 31, 1987 PHB Weserhuette announced that it had incurred losses amounting to more than 50% of its share capital. Under German company law the company has 30 days to submit proposals for reorganisation before it is forced to apply for bankruptcy. In November, the company applied to the courts for a composition order. The expected losses for the year had increased to 172 million marks. The creditors were asked to agree to a 50% write-off totalling 181 million marks (56). In December, Wolff offered his share capital to Hoesch for the nominal amount of 1 mark. While the state Nordrhein-Westfalen promised support for Weserhuette early December and Hoesch agreed to take over some of the activities, the creditors were unable to agree on a composition. Late December 1987, PHB Weserhuette withdrew the application for composition and applied for a bankruptcy order. The company had not been in the position to sustain its first year of losses. With respect to orders, the company has received large orders from the US, Russia and China. While the product range itself had been viable there was very little cost control on the highly diversified group during the period of 1984/85.

6.3.3 THE LOSSES

The major shareholder, Otto Wolff AG, claimed to have sustained losses amounting to about 150 million marks. Due to the high reputation of the chairman and majority owner of the Wolff Group, Otto Wolff von Amerongen - long time president of the German Chamber of Commerce and former leader of the trade representation for east block countries - the loans to the subsidiary PHB Weserhuette were advanced largely without any collateral. Total unsecured debt amounted to 382 million marks with around 100 million marks owed to financial creditors and 90 million marks owed to pensions. The financial creditor, which lost the least amount was the Hausbank of PHB Weserhuette, the Deutsche Bank. Prior to the composition attempt in 1986, the Deutsche Bank had reduced its credit line to PHB Weserhuette to 10 percent of the total debt outstanding. Despite being the Hausbank, the Deutsche Bank directors on the Weserhuette board were instructed by their management board not to act as leader in any reorganisation or composition arrangements (57). The losses suffered by creditors and the distribution of creditors are shown in Table 6-17.

The company was dissolved in October 1988, less than 10 months after it filed for bankruptcy. The steel conglomerate Hoesch bought the major divisions and subsidiaries of PHB Weserhuette for an estimated 55 to 65 million marks. It had resold its 50% share in the company for 60 million marks to Otto Wolff in 1985. As per agreement the other shareholder of the company, The Aachener und Muenchener Insurance company, was able to recover its equity stake of DM 12.5 million secured by a preferred debenture. The total amount of equity capital lost was therefore DM 37.5 million, which had to be written off by the Otto Wolff AG.

TABLE 6-17 PHB WESERHUETTE - LOSSES OF CREDITORS AND DISTRIBUTION OF CREDITORS
in million DM

Total unsecured claim	382.0 million
Pensions	90.0 million
Banks	100.0 million
Others	192.0 million
Total distributable assets	79.5 million
Net Losses to Creditors	302.5 million
Equity Loss	37.5 million
Total Losses	340.0 million
Preferred Claims Paid Out :	
Admin. and Legal Cost	13 million
Salaries / Wages	30 million
Social Security Payments	25 million
Total Preferred	68 million

Source : Handelsblatt 1.3.1988

6.4 SUMMARY

Of the three insolvency cases, the largest and most expensive one by far was the reorganisation of AEG in 1982. Not counting the costs to the tax payer, the majority of losses in the three cases were incurred by those who were the last to realise the financial position of the debtor company.

All three cases show clearly the complex involvement of the various claimant parties, the shareholders, creditors, employees and the government. In addition, the friction within the individual groups such as the banks in the AEG case and the shareholders in the

Beton- und Monierbau and PHB-Weserhuette case, leads one to suspect that these groupings are by no means uniform as always assumed in the finance literature. This is aggravated by some creditors being apparently able to act on advance information, as for example the Hausbank of PHB Weserhuette, the Deutsche Bank. The large costs of bankruptcy can be attributed therefore to two major factors in all three companies :

1. **Inability of the creditors to act upon the available information** in such a cohesive way that the total losses suffered by creditors in bankruptcy could be minimised.

2. **Unavailability of information to some creditors on the financial status of the debtor company.**

In the case of Beton- und Monierbau, the major loss incurred to state and central government either directly through the loss of loan guarantees or indirectly through lost wage claims and social security payments. Misinformation on the side of the government probably played a major part in the distribution of these losses. In the case of AEG, the financial creditors and shareholders were forced to write off the major portion of their advances in the composition agreement. The banks were unable to oversee the complex financial affairs of AEG and equally incapable of taking co-ordinated and decisive actions until forced by the government. While the banks were eventually able to recoup some of their losses, the pension insurer had to take on a substantial part of the liabilities. The insurers themselves increased their premia to all businesses which distributed the loss over a large number of corporations.

With PHB Weserhuette, the major shareholder who was also the major creditor, the privately held Otto Wolff AG, lost all of its investment most of which was in the form of unsecured debt. In

addition, the other creditors, with the exception of the insurance partner and the Deutsche Bank, incurred substantial losses due to their unsecured status. While the company's product lines were essentially viable, poor financing strategies had left the company overexposed to risk. Creditors had not sufficient information to force Otto Wolff to agree to a takeover or merger prior to bankruptcy. A takeover by the Hoesch Group would have been undoubtedly more profitable prior to bankruptcy than afterwards. Once the company's insolvency had become known, creditors were equally unable to co-ordinate their efforts and to agree on a common strategy.

TABLE 6-18 COST COMPARISON : BETON- UND MONIERBAU, AEG-TELEFUNKEN AND PHB WESERHUETTE
in million DM

	Creditors	Admin.	Shareholders
Beton-und Monierbau	591	11.8	120.0
AEG Telefunken	4.200	24.0	930.0 (*)
PHB Weserhuette	320	13.0	37.5

(*) the amount written off by the banks in the first rescue attempt.

In the first two cases, the costs increased because the financial condition of the company deteriorated without the required action being taken for a considerable time (10 years for both Beton-und Monierbau and AEG). In the last case, the major shareholder, Otto Wolff AG, was extremely vulnerable. Personal ambitions of the chairman of Otto Wolff AG, which had motivated the takeover in the first place, overestimated his capacity to hold onto a company with a very small equity base. Since PHB Weserhuette had not had any history of financial difficulties, the assets were relatively unencumbered. This had left other creditors in an exposed position.

NOTES:

(1) Die Welt 16.1.1979

(2) Frankfurter Rundschau 6.4.1979

(3) Frankfurter Allgemeine Zeitung 27.1.1979

(4) Frankfurter Allgemeine Zeitung 27.1.1971

(5) Handbuch der deutschen Aktiengesellschaften, 1971, Verlag Hoppenstedt & Co., Darmstadt 20/3/70/71 1971

(6) Frankfurter Allgemeine Zeitung 30.7.74, Handelsblatt 16.5.75

(7) 'Der lange Marsch des Bauriesen in den Ruin' , Handelsblatt 4.4.79

(8) Die Welt 16.1.79

(9) Frankfurter Allgemeine Zeitung 27.1.1979

(10) Handelsblatt 15.3.79

(11) The courts may reject the petition if the assets available for distribution to preferred and unsecured shareholders are found to be insufficient to cover the courts' costs.

(12) The arguments and accusations between the liquidator and the Westdeutsche Landesbank were conducted through open letters in the press such as the Handelsblatt of 7./8., 9. and 10.9.1979, 'Die Argumente der Landesbank sich von der Schuld frei zu fuehlen'.

(13) Sueddeutsche Zeitung 19.1.80

(14) Sueddeutsche Zeitung 9.8.80
(15) Frankfurter Allgemeine Zeitung 11.10.79

(16) Handelsblatt 29.10.79

(17) In Germany, the underwriting bank is liable for the accuracy of the prospectus.

(18) Handelsblatt 24/25.1.1981

(19) Die Welt 17.11.81

(20) Paragraph 45 Boersengesetz 1896/1908

(21) Handelsblatt 14.7.1982

(22) Handelsblatt 7./8.9.1979 and 10.9.1979

(23) Frankfurter Rundschau 29.9.1984

(24) Sueddeutsche Zeitung 31.10.81

(25) Frankfurter Allgemeine Zeitung 10.8.82

(26) Wirtschaftswoche 23.7.82

(27) Wirtschaftswoche 16.10.81

(28) Der Spiegel 17.12.79

(29) The Wirtschaftswoche of 23.7.82 speculated openly about the possibility that one or two banks would be forced to use up some of their own equity reserves - a situation which would be in

contravention with the banking law with immediate involvement of the Central Bank.

(30) Die Zeit 2.2.79

(31) Sueddeutsche Zeitung 9.5.79

(32) Handelsblatt 26.11.79

(33) The Economist 8.12.79

(34) Handelsblatt 17.1.80

(35) Handelsblatt 1.9.80, Frankfurter Allgemeine Zeitung 19.9.80, Spiegel 11.5.81

(36) Spiegel 11.5.1981

(37) Frankfurter Allgemeine Zeitung 30.10.81

(38) Die Welt 14.8.82 and Die Welt 19.8.82

(39) Die Zeit 11.3.83

(40) Handelsblatt 17.10.85

(41) Handelsblatt 6.10.87

(42) Die Welt 19.8.82

(43) Wirtschaftswoche 23.7.82

(44) Die Welt 18.4.1989

(45) Handelsblatt 17.10.85

(46) Die Welt 27.4.1988

(47) Handelsblatt 4.1.88, The Financial Times 11.11.87, Der Spiegel 9.1.84

(48) Financial Times 11.11.87

(49) Industriemagazin Muenchen 15.4.84

(50) Handelsblatt 10.7.85
(51) Handelsblatt 4.6.85

(52) Handelsblatt 21.8.84

(53) Sueddeutsche Zeitung 19.2.1987

(54) Handelsblatt 23.2.1987

(55) Financial Times 11.11.87

(56) Handelsblatt 11.11.87

(57) Der Spiegel 23.11.1987

(58) Estimated from news releases of Handelsblatt 10.9.1979, 24/25.1.1981, Wirtschaftswoche 19.3.82, and Company Report, Verlag Hoppenstedt & Co. Darmstadt, 1980

(59) These figures are rough estimates of the total shortfall from publicly quoted sources. No comprehensive analysis is publicly available.

CHAPTER 7 CASE STUDIES - BANKRUPTCIES AND RECEIVERSHIPS IN THE UK

7.0 INTRODUCTION

This chapter analyses the cost of three insolvency cases in the UK : Rotaprint Plc, Viners Plc and Lyle Shipping Plc. As mentioned in the introduction of the previous chapter the UK examples of insolvency are smaller in size than those of Germany. The main reason for this is that the average plc in the UK tends to be smaller than the German equivalent, the Aktiengesellschaft. Even those Aktiengesellschaften, which are privately held - like PHB Weserhuette - tend to be very substantial in size in relation to the normal UK plc.

The three largest bankruptcies in the UK in the last ten years have been Sinclair Computers, Laker Airways and DeLorean Motorcar. While comparable in size with the three German companies discussed in Chapter 6, the circumstances surrounding their bankruptcies were exceptional rather than representative. All three companies were relatively young and, in the case of DeLorean, there were suspicions of irregularities.

The companies discussed in this chapter are plc's which had been established in their market place for more than 60 years. Rotaprint and Viners faced eroding markets for their types of products, printing equipment and cutlery respectively. Both were market leaders in their product range at one time, but failed to adjust to the new production methods or new product markets. Lyle Shipping experienced the effect of global competition in the shipbuilding market and the downturn of shipbuilding in the late seventies and early eighties.

Most of the business of Rotaprint was sold in receivership in 1987 as a going concern. The remaining assets not included in the sale were sold less than one year later by the liquidator. Viners' was put into receivership in 1982. When no buyer could be found who

satisfied the requirements of the financial creditor, Midland Bank, the receiver proceeded to liquidate the company. The name and trademark of the company were sold in 1983. It took a further three years to liquidate the remaining assets. Lyle Shipping was liquidated in 1987. Since there were very few assets left to dispose of, the actual liquidation took less than one year.

7.1 ROTAPRINT PLC

7.1.1 BACKGROUND

Rotaprint was incorporated in 1927 as Kay's Rotaprint Ltd. to manufacture and service printing equipment. In 1954 the company changed its name to Rotaprint Ltd. By the late 1970's Rotaprint employed more than 1000 people. During that decade the company had been expanding at a rate of more than 10% per annum. The rate of growth of the 70's did not continue in the following decade. During the 1960's and 1970's the printing industry developed new ranges of high speed printing machines. In addition, conventional printing methods were superseded by computerised typesetting. The main customers, the newspaper and magazine publishers, changed over to computerised printing. While the demand for conventional printing methods was still present, the change to new technology was visible as early as the 1960's.

New product technology and increasingly cheaper imports forced Rotaprint's management to change its product strategy. In 1980, a new management was installed to implement the new strategy of product development and cost efficiency. To finance the new business plan the company went public in 1982. A subsequent rights issue in the same year failed to provide sufficient equity capital to finance these strategies.

The company did not achieve economies of scale to match the overseas production costs. Significant losses occurred in the period 1980/81 - at the time the new strategies were initiated. These losses were covered in part by a reduction of fixed assets. The years 1983 and 1984 seemed to give new hope to the company but problems in the implementation of the new plan resulted in a net loss of £676,000 in the financial year ending 25 March 1985, followed by a further loss of £1,266,000 in 1986.

TABLE 7-1 FINANCIAL SUMMARY OF ROTAPRINT PLC. 1977 - 1987
in £000

Year ending March	Turnover	Profit before Tax	Retained Profit	Div.	Capital Employed	Fixed Assets	Net Current Assets
1977	10,855	411	156	135	2,598	948	1,650
1978	12,867	313	183	149	2,731	972	1,759
1979	14,307	525	295	149	2,981	719	2,262
1980	15,380	174	0	14	2,930	600	2,330
1981	13,155	(533)	(442)	13	2,475	339	2,236
1982	12,559	(919)	(1,125)	14	1,336	269	1,067
1983	14,160	401	205	107	2,880	238	2,643
1984	15,663	232	165	15	3,030	214	2,816
1985	15,541	(652)	(681)	5	2,828	841	1,826
1986	14,914	(1,290)	(1,266)	-	1,523	928	595
1987	13,785	(472)	(472)	-	2,779	608	2,171

Source: Rotaprint Annual Report 1980-1977, Companies House

The 1986 reorganisation efforts focused on a significant change in the business plan. Rather than develop and manufacture its own range of printing equipment Rotaprint proposed to introduce imported printing and platemaking machines under trade and licensing agreements with overseas manufacturers. The capital refinancing programme which accompanied the reorganisation consisted of a rights issue and a placing totalling £2 million, a reduction of the book value of capital in issue and an increase in short term borrowing capacity. New management was installed. This

reduced the losses from £1,266,000 of the financial year 1985/86 to £472,000 in the following year (Table 7-1). It was not expected that the full effect of the reorganisation efforts would be felt until 1989. The past problems, however, continued to persist in the following areas.

1. Low efficiency levels, partly due to antiquated production methods and equipment.
2. Product specification mismatch with suppliers.
3. High cost of establishing the new product line.

In November 1987 management reported a deficiency of £188,000 mainly due to costing errors of the new machines. In addition, the company was unable to cope with quality control and other output problems. Total trading losses for the 8 month to November 1987 amounted to £980,000 (1).

By 1987 the company employed less than 500 people. It operated from its manufacturing base in London, 6 regional branches and a trading subsidiary, Rotaprint Inc., a US distributor of the company' products. The nominal value of the share capital amounted to £2,217,000 (Table 7-2 Balance Sheet of Rotaprint for the years 1986 and 1987).

The company's main bank since 1980 was Midland. The bank initially supported the reorganisation efforts having secured its monetary advances since 1984 by a floating and fixed charge over the company's assets in return for increasing amounts of overdraft facilities (2). When approached in 1987 by Rotaprint's management to increase the overdraft facilities Midland demanded a reduction in the company's facility procurement problems. By June 1987 the overdraft rose to £1.7 million. Three months later the cash situation became critical. An attempt to make a rights issue failed when the merchant bank, Robert Fleming and Co. Ltd., refused to

TABLE 7-2 BALANCE SHEET OF ROTAPRINT FOR THE YEARS ENDING MARCH 31, 1986 AND 1987 (in £000)

		1986		1987	
ASSETS :					
Current :	Stocks	4,101		3,932	
	Debtors	2,921		2,897	
	Cash	36		30	
			7,058		6,859
Fixed			608		928
Total Assets			7,666		7,787
LIABILITIES :					
Current :	Overdraft	1,239		1,835	
	Current Instalment	156		417	
	Trade Creditors	1,524		1,949	
	Others	1,599		1,542	
			4,518		5,743
Longterm			369		521
Total Liabilities			4,887		6,264
CAPITAL :					
Shares in Issue			2,217		1,850
Capital Reserves			127		759
Revaluation Reserve			-		484
Profit and Loss Account			435		(1,570)
			2,779		1,523
Total Liabilities & Capital			7,666		7,787

support it. In the meantime Midland and Fleming ordered an investigation into company affairs. By the end of September the company had exhausted its overdraft limits. Only guarantees by the company directors secured a further increase of short term funds. The investigation was conducted by the accountancy firm Coopers and Lybrand and pointed to the problem of high inventory in relation to its sales as the cause of the company's cash flow problems.

On 23.2.88 attempts to refinance were aborted and Midland withdrew its credit facilities. The company requested a suspension of its stock exchange quotations and appointed the accountants M.A. Jordan and C.J. Hughes of Cork Gully as receivers three days later.

7.1.2 THE RECEIVERSHIP

The appointment of the receiver was followed by an immediate redundancy of 144 of the 500 or so employees and the decision to continue trading. Less than a week later the business was advertised for sale in the Financial Times of 5.3.1988. After obtaining 200 enquiries, 30 visits and 4 offers, a bid of £2.7 million from a consortium led by Alan Patricof Associates Ltd was accepted on 5.4.1988. The sale excluded the manufacturing plant and the company's debtors but included most of the company's fixed assets, stocks and goodwill. At the end of March the remaining employees were made redundant but most were offered employment by the new owners of the company. Following the sale of the business and within the terms of the Insolvency Act 1986, a creditors' meeting was convened on May 18, 1988. Prior to the meeting the receiver sent out his report on the current financial position of the company together with a note that the company was being put into liquidation.

At the shareholders' meeting on June 11, 1988 an extraordinary resolution was passed to put the company into liquidation and to be wound up voluntarily. A liquidator, Brian Mills of Booth, White & Co., was appointed. The shareholders' meeting was followed by a creditors' meeting to confirm the appointment. Since all secured creditors had been paid off from the proceeds of the sale of the business and other revenues received from trading and outstanding debtors during that time, the liquidators task was to sell the remaining assets and distribute the proceeds to the preferred and unsecured creditors. The proceeds were insufficient to satisfy the shareholders.

7.1.3 CREDITORS

In the last audited accounts of the year ending March 31, 1987 total claims (total liabilities and share capital) were given as £7,666,000. Of this, almost 64% (or £4,887,000) consisted of secured and unsecured liabilities (see Table 7-1). At the time of receivership the total claims had risen to £10,130,000 with total liabilities amounting to £7,913,000. The amount owed to unsecured creditors stood at just over £4 million. The bulk of unsecured creditors consisted of trade creditors with a total of £2.2 million outstanding. Of the 656 trade creditors only 37 were owed more than £10,000. Unsecured contingent claims accounted for £1.5 million. The remaining unsecured claims were due to 116 expense creditors claiming for services such as telephone, legal and accountancy expenses prior to insolvency. Only 10 expense creditors' claims were in excess of £10,000 (Table 7-3).

Preferential creditors were owed more than £1.4 million. All claims of the preferential creditors were satisfied. Of the preferential creditors, the Inland Revenue and Customs and Excise Office (VAT)

TABLE 7-3 UNSECURED CREDITORS OF ROTAPRINT AS OF 2.6.1988

Trade Creditors	£2.2 million
Expense Creditors	£ .4 million
Contingent Claims (incl. redundancies)	£1.5 million
Total	£4.1 million

Source : Rotaprint Statement of Affairs, Cork Gully

were owed almost £700,000 with the employees having a claim on the remainder. The breakdown of the preferential creditors is given in Table 7-4.

TABLE 7-4 PREFERENTIAL CREDITORS OF ROTAPRINT AS OF 2.6.1988

Inland Revenue	£470,000
Customs & Excise	£210,000
Wages	£170,000
Holiday Pay	£240,000
Pension Contribution	£370,000
Total	£1,460,000

Note : There is a slight discrepancy between the amount owed to preferential creditors from Table 7-4 and Table 7-5 due to adjustments made between the first Statement of Affairs on 26.2.88 and the second one on 2.6.88.

Source : Statement of Affairs as per Receivers' Deficiency Account dated 30.3.87 - 2.6.88.

The only fixed charge over the company's assets was held by the financial creditor, Midland Bank Plc, amounting to £2.4 million. Pledged assets had a book value of over £3.1 million though the estimated realisable value amounted to only £2.4 million, about 77% of the company's book value as per Statement of Affairs. The real value of assets not specifically pledged amounted to £2.8 million and were available to preferential and unsecured creditors.

The total book value of assets amounted to £7.7 million. The estimated realisable value discounted the book value by about 30% and was based on the assumption that the company could be sold as a going concern. The net break-up value of the company, excluding the fixed assets sold in liquidation, was estimated to yield no more than £400,000 compared to £2.7 million obtained by the receiver. Table 7-5 shows the book value and estimated to realise value of the receivership together with the outstanding liabilities.

The shortfall of £4.7 million was carried by the shareholders and in part by the unsecured creditors. Additional expenses not shown in the statement included the receivers', liquidators', agents' as well as legal fees and associated expenses. Though no detailed break-down is available it can be estimated that the fees for disposing of the company as a going concern were in the region of £250,000 to £300,000. Estimated liquidation fees amounted to an additional £300,000. Expenses such the creditors' meeting and report on the affairs of the company increased this sum by an estimated additional £50,000.

The receiver only dealt with claims put forward by the secured and preferential creditors. Claims from unsecured creditors were handled by the liquidator.

TABLE 7-5 BOOK AND ESTIMATED TO REALISE VALUE AND LIABILITIES OF ROTAPRINT 22.6.88

	Book Value (in £000)	Estimated to Realise (in £000)
Assets		
Pledged	3,192	2,366
Not Pledged	4,455	2,835
Receivership Debtors	-	223
Investments	3	nil
Total Assets	7,650	5,424
Liabilities		
Secured Creditor Midland Bank Plc	2,402	2,402
Preferential Creditors	1,453	1,453
Unsecured Creditors	2,558	2,558
Contingent Claims	1,500	1,500
Share capital	2,217	2,217
Total Claims	10,130	10,130
Net Deficiency	2,480	4,706

(*) No account is taken for receivers' and liquidators' fees at this stage.

Source: Statement of Affairs of 22.6.1988

7.1.4 THE LOSSES

Since all preferential creditors were paid in full the cost of insolvency was carried by two groups only, the unsecured creditors, which consisted suppliers and employees claiming redundancy, and shareholders. There were no wage claims or pension claims outstanding which could not be satisfied. The financial creditor,

Midland Bank Plc, received priority payment from the proceeds of the sale. Thereafter, the preferential creditors were paid off. The unsecured creditors, who consisted of trade suppliers and subcontractors, received little more than 20 pence in the pound. It took the receiver six weeks after being appointed to sell the business. The rest of the company is still in the process of being wound up. It is estimated that assets, amounting to £1,569,000 are available to unsecured creditors. From this amount the receiver's and the liquidator's costs and fees must be subtracted. The costs of the receivership and subsequent liquidation can be estimated as shown in Table 7-6.

TABLE 7-6 ROTARPINT : LOSSES THROUGH RECEIVERSHIP AND LIQUIDATION

	in £000
Share capital	2,220
Receivers' Fees & Cost	300
Liquidators Cost	300
Expenses	50
Net Debt Claims (*)	3,150
Total Cost	6,020

* Total Claims (£4,100) and fees (£650) less available assets (£1,600) all rounded off.
Source : Statement of Affairs, Cork Gully 1988

The total amount lost in the insolvency of Rotaprint was therefore just over £6 million. The amount lost can be taken as the direct cost of insolvency. In terms of total cost, the receiver and liquidators fees amounted to about 10% of the total. The case illustrates a point made earlier in chapter 3 and chapter 5. At the

time of insolvency the book value of assets equalled the booked value of liabilities, with the book value of equity at zero. Theoretically, this would be the optimum time for dissolution of the firm. However, the book value of the assets decreased by 30% when the assets were sold leaving the creditors as well as the shareholders to pay for the shortfall.

7.2 VINERS Plc.

7.2.1 BACKGROUND

The company Viners (or Viener's at that time) was founded by William Viners and his brothers in 1907 in Sheffield. The brothers were naturalised British citizens having immigrated from Germany as electroplate and silversmith craftsmen. Initially the company produced high quality cutlery. By 1912 the company employed 70 people. In 1924 Viener's incorporated as a registered limited liability company with a share capital of £25,000 at £1.00 per share. The object of incorporation was to enable Vieners to take over the company 'Electro Plate and Cutlery Manufacturers and Silversmiths'. The product range was enlarged to include not only table cutlery but also pen and pocket knives, razors, blades and shears. One year later the company name was changed to Viner's Ltd. Growth led to a continuous increase of share capital, initially by way of capitalisation of retained profits. In 1934 capitalisation of reserves increased share capital to £255,000. During the 1930's the premises were enlarged and by 1939 the company was not only one of the largest cutlery manufacturers in the country, with 1500 employees, but had also received a Royal Warrant as suppliers of cutlery to King George V.

After World War II the company initially survived quite well. Share capital was increased in 1963 to £320,000 and in 1973 to £575,000

again primarily by means of capitalisation of reserves. In 1968 the company directors had decided on a new strategic expansion plan which called for the increased penetration of the middle and lower end of the market. With new management in the 1970's, the company embarked on an investment programme providing for modernisation of plant and equipment. Specifically, the new business plan called for:

1. Unification of product lines.
2. Promotion of cheaper styled Asian cutlery.
3. No production of sterling silver cutlery.

Management expected the growth rate of the 60's to double with the new strategy. For this purpose equity was raised for the first time from outsiders. 250,000 pounds were raised in 1973 on the stock exchange by placing 1 million shares with outside institutions. Market capitalisation stood at a peak of £3.4 million at that time. The company employed 900 people and claimed to be the biggest comprehensive cutlery and table and flatware company in the UK (3). Between 1971 and 1976 the company invested about £2 million into new technology and business expansion locally and abroad. Of that amount £800,000 went into business acquisitions, the remainder into updating and expansion of existing facilities (4). Table 7-7 shows the financial summary of Viners' performance between 1964 and 1980.

The new strategy resulted initially in large increases in turnover accompanied by similar rises in profits before taxes between the years 1967 and 1975. Fixed assets rose steadily together with net current assets and capital employed. By 1976 the new strategy of market penetration at the middle and lower range started to hit obstacles. Competition from abroad squeezed the company's profit margins. While Viners had originally handled the cheaper cutlery imports themselves, towards the end of the 70's Korean manufacturers found it more profitable to retail their merchandise

TABLE 7-7 FINANCIAL SUMMARY OF VINERS 1964 - 1980 (in £000)

	Turnover	Profit before Tax	Retained Profit	Div.	Cap. Empl.	Fixed Assets	Net Current Assets
1964	1,659	167	42	35	721	256	465
1965	2,145	182	71	38	768	274	494
1966	2,512	202	58	38	817	277	539
1967	2,620	267	85	39	906	284	622
1968	2,940	303	104	41	1,010	331	679
1969	3,135	308	96	44	1,109	387	722
1970	3,519	210	58	45	1,167	546	620
1971	3,777	284	102	46	1,269	537	731
1972	4,313	467	220	52	1,955	1,018	936
1973	6,190	727	282	55	2,168	1,384	784
1974	7,127	746	306	60	3,027	1,509	1,517
1975	9,069	794	288	64	3,555	1,720	1,835
1976	10,371	434	80	132	4,478	1,928	2,550
1977	10,413	30	40	60	4,320	1,850	2,470
1978	10,702	170	12	67	4,298	1,847	2,451
1979	11,148	(21)	(3)	9	4,655	2,107	2,547
1980	12,067	(104)	266	9	4,244	2,198	2,046

Source : Viners Financial Accounts, Companies House

themselves without a middleman. By 1980 about 95% of total table ware came from abroad, about one-half of this was supplied by South Korea. In terms of value, imports accounted for 70% of the total business (5).

Without the agency for imported goods, Viners found it difficult to maintain its profit margin in mass production. In 1976 profits were almost halved. Net current assets had increased more than three-fold between 1973 and 1976 in anticipation of increased sales. These increases consisted in the main of stock build-up. The company was unable to reduce its scope of operation. Overproduction and the consequent stockpile of unsold merchandise contributed further to the poor results in the following years. The last audited accounts of the company for the year 1980 showed stocks valued at more than £5 million amounting to almost 60% of current assets and 50% of total assets as shown in the Balance Sheet in Table 7-8. Similarly high in relation to total assets were

the amount of creditors and short term bank finance, most of which was on a secured basis. Liquid assets stood at 50% of short term liabilities and with sluggish sales the company found itself in a liquidity crisis.

TABLE 7-8 BALANCE SHEET - VINERS PLC, 1980
(in £000)

Assets:		
Fixed Assets		2,175
Trade Investments		23
Current Assets:		
Stocks	5,179	
Debtors	2,620	
Cash	112	
		7,911
		10,109
Liabilities:		
Bank Loans & Overdraft (Secured 2,350)	2,711	
Other Secured	90	
Creditors	2,903	
Tax	161	
		5,865
Capital Employed		4,244
		10,109

Source : Viners' Audited Accounts, Companies House

Additional problems arose when the French subsidiary failed to show profits. In September, Viners' board of directors accepted a take-over bid from a consortium of two businessmen. Under the terms of the take-over the chairman Roger Viner resigned from the active management of the company together with most of the family members who were on the board of directors. The new owners injected £1.45

million via a rights issue and bought the remaining shares for a total of £116,000 or 2p per share. The new programme supported by Midland, Viners' bankers, centred on the following main points:

1. Lower manning levels resulting in redundancies of more than two hundred employees.
2. Adjustment of the product range by concentrating on the higher and lower end of the flat (cutlery) and hollow ware (coffee pots and trays) markets.
3. US market introduction.
4. Sublease of factory. The planned manufacturing was estimated to take up only one-quarter of the existing manufacturing space.
5. Tighter management control.

In July 1982, however, one month after a new managing director had been appointed and before the new programme could be fully implemented, Midland Bank withdrew its support and called in the receiver. The losses for 1981 had turned out larger than expected. In addition, the French subsidiary had gone into receivership leaving Viners with an additional debt guarantees of £500,000. While it was expected that the market for Viners' product ranges was to decline by between 5% and 10%, actual erosion of the market turned out to be around 25% for cutlery and 30% to 40% for the gift ware range. Shares were suspended at 1p on the stock exchange (6).

7.2.2 THE RECEIVERSHIP

The receivers, Ian Peter Phillips and Geoffrey Martin of Arthur Anderson, obtained more than 20 inquiries for the company (7). When the offer submission expired on August 20, 1982, it became apparent that market conditions and the terms of the financial creditor, Midland Bank, made it impossible to proceed with an acceptable bid

with a floor price of £1.1 million. A second rescue attempt by the owners and Sheffield's Labour controlled Council failed (8). Eventually, the consortium managed to raise the required £1.1 million but failed to get adequate working capital to continue the operation. Midland refused to accept the compromise proposal to defer payment of £300,000 of the purchase price.

By December 1982, the receivers had accepted an offer from the Trafalgar Group for the Viner name and trade marks. The Trafalgar Group, a former customer of Viners, is in the promotion and incentive packages business. The group does not itself manufacture but subcontracts the manufacture of its promotional merchandise. By 1986, the remaining assets had been sold and on 16.10.1986 the receivers gave notice of ceasing to act as receiver manager. It took more than four years to wind up the company. The break-up raised more that £770,000 for the floating charge debenture holder but was not sufficient to pay him off in full. Secured and preferential creditors received their claims in full.

Since 1965 Midland Bank had held a floating charge over the company's assets. Legal charges and mortgages, held primarily by Midland Finance Ltd. in the following 15 years, left the assets of Viners heavily encumbered. All the freehold property was mortgaged by the end of 1981. The result was that the unsecured creditors, primarily trade creditors, had to write off their total claims.

The receivers' Statement of Affairs, Table 7-9, shows the magnitude of pledged and unpledged assets in relation to the liabilities and the capital of the company. Total liabilities and capital amounted to almost £5 million against total realisable assets of just over £2 million. Midland Bank, the floating charge debenture holder, was owed £2.4 million but was only likely to receive £770,000.

TABLE 7-9 STATEMENT OF AFFAIRS OF VINERS as of 23.7.1982 (in £)

	Realisable Value	Total
1. Assets :		2,045,252
Unpledged	209,004	
Pledged	1,836,248	
2. Liabilities (*) :		4,908,902
Secured (by Property)	1,202,772	
Preferential	71,963	
Floating Charge Debenture	2,407,231	
Unsecured Trade Creditor	141,936	
Capital	1,085,000	
3. Estimated Balance for Floating Charge and Unsecured Creditors		770,517
4. Deficiency for Floating Charge Debenture Holder		1,636,714

(*) in order of preference

Source : Receivers' Statement of Affair and Deficiency Account, Companies House

The main loss accrued to the financial creditor. This was, however, unusual. The explanation for the low amount owed to trade creditors must lie in the buy-out of Viners in the year prior to its insolvency. Trade creditors apparently did not extend credit to the new consortium and secured their merchandise with specific liens. Liability to creditors in the last audited account was shown as £2.9 million. While some of this was undoubtedly secured by stock unsecured trade creditors were higher at the time of the take-over than shown in the Statement of Affairs, 18 months later.

7.2.3 THE LOSSES

The final accounts filed in Companies House list the Receivers' receipts and payments from the liquidation of the available assets (Table 7-9). Total receipts amounted to just over £600,000 with the bulk of the monies coming in during 1984. About one-quarter was received before July 1983, an additional 60% between August 1983 and July 1984 and the remainder in 1984/1985. There were no more receipts after that period and final payment to the debenture holder was made in 1986. Table 7-10 shows the distribution of the available assets between the debenture holder, the receivers and the various professional consultants.

TABLE 7-10 DISTRIBUTION OF LIQUIDATED ASSETS OF VINERS (in £)

To July of	Receiver	Other Fees	Preferential Creditors (*)	Floating Charge	Total
1983	-	460	6,768	-	7,228
1984	9,540	10,000	140,658	305,001	465,199
1985	30,000	45,244	(584)	-	74,660
1986	-	-	-	54,060	54,060
Total	39,540	55,704	146,842	359,061	601,147

* includes expenses incurred during the liquidation

Source : Abstract of Receivers' Receipt and Payments, Companies House

Total fees allocated to liquidating the company amounted to just over 16% of receipts with the receivers fees amounting to under 7%. The floating debenture holder was able to recuperate about £359,000 from the total liquidated unpledged assets. The total book cost to the creditors and shareholders of the company is detailed in Table 7-11.

While the liquidation of the company appears to have been less costly than that of Rotaprint the costs of two companies are not directly comparable. Rotaprint was essentially reorganised in receivership with the remaining assets being liquidated. Viners was liquidated without any large costly reorganisation efforts. The financial creditor in Viners lost most of his investment (£1,623,000) since he held a floating rather than a fixed charge. As such he had no claim on the assets prior to the preferred creditors. It appears that the financial creditor of Viners wanted to cut his losses quickly. This being the main consideration of the financial creditor would explain the urgency of the liquidation rather than waiting for the outcome of the uncertain receivership process. In retrospect, the offer of £1.1 million less £300,000 deferred obtained by the receiver and rejected by Midland Banks, proved to be equal to the amount eventually obtained by the creditor, not counting the amount of accrued interest during the four years of liquidation.

TABLE 7-11 VINERS : LOSSES THROUGH LIQUIDATION

	in £000
Share capital	1,085
Receivers Fees	40
Liquidation Fees	56
Net Debt Claims (*)	1,556
Total Cost	2,737

(*) see note 12

7.3 LYLE SHIPPING PLC

The shipping activities of the Lyle family go back to 1791 when Gideon Lyle and his brother's son Abram II entered into a partnership with some local mariners in Greenock, Scotland, to purchase a sloop. The main business of the Lyle's was cooperage at the time. Initially cooperage provided for the storage of salted fish. The gradual elimination of sugar duty in Britain opened up further expansion opportunities for the Lyle business. Shipping was developed to enable the growth in the rising market of refining and storage of sugar. By the mid-nineteenth century the Lyle's had fully diversified into the refining of sugar. The sugar business was transferred to London in 1881 and most of the Lyle family, four of the six grandsons of Abram II, established themselves in London. The cooperage and shipping arm of the family business remained in Scotland. The shipping business was finally incorporated as a private limited liability company in 1890 as the Lyle Shipping Company Ltd. run by A.P. Lyle. Ownership of the capital of £96,100 remained in the hands of the family. Concentration on building up the sugar refining business starved the other activities of the family of funds. During the 1890's, the cooperage business was closed and the number of ships reduced from ten to four. Changes in the shipping industry, in particular the change over to steam engines, finally forced the company to go into voluntary liquidation in 1899 with a loss of share capital of £8,672.

The company was re-established in 1903 as a private limited liability company by A.P. Lyle who sold his share of the sugar business. The new company was a partnership between Lyle and a small number of local business men. It had a share capital of £136 and was incorporated to manage the vessels of eventually five single ship companies. The partners had financial interests in these single ship companies though each was incorporated as separate limited liability entity. Following the establishment of

the Scottish shipbuilding industry on the Clyde, the Lyle Shipping Company moved to Glasgow in 1906. The First World War reduced the five ships to two but compensation by the insurances and the Government left the company in a healthy financial state. By the end of the war the company had amalgamated with its single ship companies.

7.3.1 BACKGROUND OF LYLE SHIPPING COMPANY

In 1920 the Lyle Shipping Company Ltd. was re-incorporated with a share capital of £500,000 divided into 150 management shares and 4,350 ordinary shares at £100.00 each. The total paid-up capital amounted to £250,000. In addition, the old company had amassed assets - primarily in the form of war loans and stock in public companies - at a book value of more than £650,000 (9). The activities of the company expanded from the management of ships to all areas of commercial shipping such as ship ownership, ship and insurance brokerage, shipping and forwarding agency. The interest of A.P. Lyle and his family remained strong and by 1927 they managed to increase their management shares from 40% to about 50% and their ordinary share holding to 2/3 of all outstanding ordinary shares.

With the gradual withdrawal of the family interests the company went public in 1952. Having survived the Second World War well financially with net tangible assets rising from £350,000 in 1939 to £1,200,000 in 1946, the company embarked on an expansion programme with increases in total capital from £500,000 in 1952 to £3,500,000 in 1981 (Table 7-12). At the time of the receivership in 1987 the company had a paid up capital of almost £6,300,000 consisting of 12 million ordinary shares of £.25 and 3,300,000 cumulative preference shares at £1.00 each.

TABLE 7-12 HISTORY OF SHARE CAPITAL OF LYLE SHIPPING (in £)

Year	Authorized	Management (Preference)	Ordinary	A-Shares (non-voting)
1920	£500,000	20,000	480,000	-
1923	500,000	65,000	435,000	-
1952	500,000	-(converted)	500,000	-
1953	1,000,000	500,000(pref)	500,000	-
1957	1,500,000	500,000	500,000	500,000*
1967	2,000,000	500,000	750,000	750,000
1972	2,500,000	500,000	1,000,000	1,000,000
1981	3,500,000	500,000	3,000,000	-
1985	6,300,000	3,300,000	3,000,000	-

*Bonus Issue

Source : Lyle Shipping Company Accounts, Companies House.

The 1960's marked the beginning of an era of consolidation of shipping companies and their diversification into other areas of transport, such as air and road transport. Lyle Shipping invested in 1967 in Caledonian Airways of which it owned more than 16% by the late 70's. Oil and gas exploration in the North Sea led to diversification into joint ventures in oil drilling and, more successfully, into the running of supply vessels to offshore rigs and platforms. The later venture included warehousing and complete transport facilities to and from the rigs. However, the principal activity continued to be bulk shipping.

In the late 1970's, international freight rates collapsed. International freight competition had steadily increased in the two previous decades with the entrance of freighters registered under overseas flags. The collapse in the freight market led to price cutting to keep the large bulk carriers afloat. Overproduction of carriers during that period also reduced shipbuilding activities to a fraction of that in the previous decade in the UK with overseas shipyards dominating in receiving orders. This depressed

TABLE 7-13 DETAILS OF LYLE'S SHIPPING FLEET OF 1983

	Number	Tonnes (dwt)	Book Value (in £ million)
Owned	6	155,015	36
Long Term Charter	7	200,842	26
Managed	4	105,439	-
Under Construction (1984/85)	2	83,650	22
Total	19	544,946	84

Source : Annual Report 1983, Company's House

the value of the existing fleets so that by 1983 the book value of the company's fleet fell below its realisable value. Concern over this discrepancy led the auditors Arthur Young McClelland Moores & Co. to qualify the company's accounts. At that time the accounts showed a book value of £84 million for the fleet and a total managed tonnage of about 460,000 dead weight tonnes (Table 7-13). The company managed 17 vessels with an average tonnage of 24,000. Of this only 6 vessels were owned outright. The remaining fleet was either under long term charter or on straight forward management contract. The two new vessels shown in Table 7-13 as under construction were built by a Japanese company and leased on long term charter in 1985.

Since the expansion period in the 1960's the company had financed its fleet increasingly from external sources. Long term liability stood at £5,765,000 in 1974. By 1983 the figure had increased to £48,423,000. At the same time the turnover rose from £9,380,000 to £20,671,000. Interest commitments worsened by foreign exchange losses resulted in a steady decline of earnings from a profit before taxes of £2,192,000 in 1974 to a loss of £5,048,000 in 1983 (Table 7-14).

Results for 1984 showed a worsening of the company's financial

TABLE 7-14 FINANCIAL SUMMARY OF LYLE SHIPPING PLC. 1974 - 1985 (in £000)

	Turnover	Profit before Taxes	Retained Profit	Div.	Net Capital Employed	Fixed Assets	Net Current Assets *
1974	9,380	2,192	641	223	11,323	17,546	(458)
1975	9,246	12	(400)	242	10,822	23,648	(2,689)
1976	12,081	2,002	1,436	270	9,038	34,057	(5,327)
1977	13,457	867	(194)	295	10,240	34,959	(9,249)
1978	11,575	3	(915)	334	10,736	32,909	(4,029)
1979	13,745	3,391	2,761	455	14,033	35,360	(4,198)
1980	21,578	6,675	5,832	688	20,629	32,675	181
1981	26,489	6,713	5,812	988	35,683	51,628	7,262
1982	25,017	(4,787)	(5,870)	243	29,872	70,786	(4,498)
1983	20,671	(5,048)	(5,374)	200	24,265	83,401	(10,713)
1984	23,849	(16,801)	(16,831)	-	(1,410)	94,460	16,377
1985	18,639	6,812	6,912	-	12,179	87,104	17,829

* Current Assets - Current Liabilities

Source : Financial Accounts, Lyle Shipping Plc, Companies House

position with a pre-tax loss of £16,801,000. The next year's positive result was solely attributed to exchange gains of over £12 million and to the sale of four ships for a total of £9 million. This reduced the total tonnage owned or leased (including those two vessels under construction) from 439,507 to 301,577 dwt.

Accounts for the first half year of 1986 showed a decline in pretax profits to £313,000. Losses after depreciation and interest amounted to £3.4 million. The financial press reported a fall in turnover in the first 6 month of 1986 of £4.01 million to £6.39 million compared to the same period of the previous year. The group found itself in default with its three main lenders, Bank of Brazil, Continental Illinois Bank and the Royal Bank of Scotland in early 1987. While the last appeared inclined to accept a long term recovery plan set out by the company in April 1987, the foreign banks, particularly the Continental Illinois Bank, were not unable to wait any longer. Continental Illinois itself was in

financial difficulties in the US. The company, which had delayed the publication of its results after consultation with its bankers, was forced to call in the receiver in May 1987. Even the upturn in the freight market was insufficient to convince the lenders that trading could continue profitably (10). The company had been able to continue trading purely on the basis of exchange rate gains and an interest moratorium of the lenders negotiated in 1985.

Almost all of the company's financial debt was denominated in US dollars. The last financial statement for the year 1985 showed the volatility of this debt commitment. Total long term loans in 1985 amounted to £36.777 million, of which about one-half was denominated in variable interest rates. Long term lease commitments were almost exclusively termed in variable rates (Table 7-15).

The balance sheet of 1985 in Table 7-16 (the last published year) showed total fixed assets of more than £87 million. Current assets amounted to £29 million of which £24 million were held in cash. This cash was part of the lease agreement and was not available for working capital. Long term loans and other long term provisions were shown as £93 million with equity capital £12 million. Since the long term loans were denominated in dollars any adverse fluctuations in the exchange rates could cause the book value of the debt commitment to exceed the book value of the assets. Losses in 1986 prompted further deterioration with the result that by the end of 1986 the company had accumulated more long term debt than realisable fixed assets. All short term debt had been advanced on the basis of a floating charge or against specified assets. Furthermore, the auditors had qualified the accounts for the third year stating that the asset values as shown in the accounts were unlikely to be realisable if the assets had to be liquidated.

TABLE 7-15 FINANCIAL COMMITMENTS OF LYLE SHIPPING 1985
Long Term Loans in '000 US Dollar:

Interest	Repayment Period	Amount
7%	less than 5 years	$19,798
LIBOR + 1.375	1987 - 1993	7,508
LIBOR + 1.375	1987 - 1990	5,190
LIBOR + 1.5	1989	4,266
Total		36,762

Leases in US Dollar:

Interest		Amount
10.5%		1,189
LIBOR + 1.25		47,753
Total		48,942
Total Commitments		£85,704

Source : Annual Report 1985, Lyle Shipping Plc

When the company finally defaulted on its debt commitment, negotiations involving advances of more than £50 million were reported by the financial press (11). This amount would have increased the total debt commitment by more than 50% and left total assets to be financed by 30% more than its book value.

At the time of receivership Lyle Shipping PLC had interests in or owned 8 subsidiary companies of which 4 were single ship companies, a ship management and broking firm, a ship broking, a charter and a leasing company. The appointed receiver liquidated the holding company and the Lyle Motorship Co Ltd. All of the 400 employees were made redundant. The immediate cause of failure was the forced sale of the four ships in the previous two years thus removing any

TABLE 7-16 BALANCE SHEET OF LYLE SHIPPING 1985
(in £000)

Assets		
Fixed		87,104
Current		
Stocks	619	
Debtors	4,630	
Cash	23,588	28,837
Total Assets		115,941
Financed By:		
Liabilities		
Current		11,008
Long Term		92,754
Total Liabilities		103,762
Equity		
In Issue	5,808	
Premium	13,342	
Reserve	1,036	
P/L Account	(8,007)	12,179
Total		115,941

Source : Annual Report 1985, Lyle Shipping Plc

hope of benefiting from an improvement in the freight market.

7.3.2 THE RECEIVERSHIP

When the receiver took over it was found that the discrepancy between book and realisable value had not been overstated. The realisable value of the unsecured assets amounted to £316,000 against its book value of £5,541,000. The actual deficiency attributable to creditors and shareholders amounted to over £65 million. The total estimated realisable book value of the

deficiency was just under £14 million. The floating charge holder, the Royal Bank of Scotland, lost all its advances totalling £17,300,000. Secured creditors found that the book value of their asset security amounted to less than their realisable value leaving them with claims against the company as unsecured creditors of over £29 million (contingency claims). The smallest group consisted of unsecured trade creditors of £124,000 which arises from the fact that the shipping industry provides a service rather than a product. As such it does not carry stocks. Investment in short term assets is small in relation to fixed asset investment. Table 7-17 shows the Summary of the Statement of Affairs on 15.5.1987, one week after the company went into receivership.

About one year after being put into receivership Lyle Shipping was effectively wound up and all the unpledged assets, including the company's premises, were sold. While Lyle Shipping had various interests in its subsidiaries these had been pledged and subsequently transferred at the time of the receivership. The subsidiaries owned in joint venture with Hogarth Shipping and other companies were not forced into liquidation.

7.3.3 THE LOSSES

Though the final accounts have not been filed in Companies House, the receivers' submissions for 1987/88 shows that the company has effectively been wound up. Receipts for the period between May 1987 and May 1988 amount to just over £330,000 of which £320,000 has been distributed. On the basis that the total estimate of realisable assets came to £316,000 and that the receiver has given notice that the company's premises had been transferred to that of the receiver, one can assume that most of the assets have been disposed of. Payments to the receiver and other liquidation fees amounted to £8,600 with a probable addition of £10,000. The total

TABLE 7-17 STATEMENT OF AFFAIRS OF LYLE SHIPPING AS OF 15.5.1987 (in £000)

	Book Value	Estimated Realisable Value
1. Assets (*) :		
Assets not secured	5,541	316
2. Liabilities (**):		
Total		46,667
Holders of Floating Charge		17,300
Unsecured Creditors		
Trade	124	124
Contingencies and others		29,243
3. Issue and called up capital	19,150	19,150
4. Total Liabilities & capital	19,274	65,817
Net Deficiency	13,733	65,501

* Value of Fixed Assets not shown in the official Deficiency Account
** Secured Liabilities not shown in the official Deficiency Account.

Source : Receivers' Statement of Affairs and Deficiency Account,1987, Companies House.

amount lost in the insolvency of Lyle Shipping comes to more than £65 million. Considering that total claims in the two years prior to insolvency had amounted to £103 million, only one- third could be satisfied.

TABLE 7-18 LYLE SHIPPING : LOSSES THROUGH LIQUIDATION

	IN £000
Share capital	19,150
Receivers & Liquidation Fees	19
Floating Charge Creditor (Net)	17,028
Trade Creditors	124
Contingency Creditors	29,243
Total Claims	65,564

Source : Receivers' Statement of Affairs and Deficiency Account, 1987, Companies House.

The actual liquidation of the company only took one year, since at the time of liquidation there was very little left to liquidate. The main loss was carried by the institutional and financial creditors. One suspects that an earlier liquidation would have yielded a far more satisfactory result for the creditors as a whole. As to the reason why the financial creditors allowed themselves to be burdened with such a large financial loss despite the continued warnings of the company's auditors since 1984 (for the accounts of 1983) one must assume that other reasons seem to have played a substantial part in the delay.

The company was located in Scotland, a politically sensitive region and its problems developed at a time when there was a general downturn in the business and economic cycle. The type of business, shipping, was on the government's list of industries to be supported. In fact, Lyle Shipping had been the recipient of government investment grants in the past to protect the British shipbuilding industry. Management was not only seen to be

trustworthy and efficient but also well connected and respected as public figures. It is also conceivable that the Royal Bank of Scotland was unwilling to liquidate a company which not only had been its customer for almost a century but also represented one of the main names of Scottish industry.

Though government money had previously subsidised the company, the public purse was not called upon at the stage of insolvency. Government involvement in the company was a part of general schemes such as investment incentives rather than specific rescues. Where the government was represented as a preferred creditor, it lost its money as did all other creditors.Two factors contributed to the delay of the liquidation decision:

1. Faith in the management of the company, and
2. Uncertainty of the exchange rate movement.

Exchange gains in the last two years prior to liquidation enabled the company to survive even though operating losses had increased steadily over that period. When the dollar/sterling relationship finally stabilised in 1986/87 the company found itself unable to survive without these gains. Without doubt, the two year deferral of insolvency resulted in a greatly increased deterioration of the creditors' position.

7.4 SUMMARY

Of the three UK companies studied here, only Rotaprint survived. In the case of Viners it is at least arguable that a better solution than liquidation, and the destruction of business expertise, could not have been found, especially since several offers of takeovers had been received. Yet the financial creditor rejected all proposed rescue plans. The financial deterioration of

the Lyle Shipping Company was such that only major financial injections could have helped to turn the company around. With the market experiencing a downturn, this could not have been provided through the private shipping market.

TABLE 7-19 **COMPARISON OF CLAIMS : ROTAPRINT, VINERS AND LYLE SHIPPING** (secured and unsecured) (in £ million)

	Last Annual Report		Statement of Affairs			
	Turnover	Assets	Creditors' Claims	Admin. Cost	Share-holders	Total Claims
Rotaprint	13.8	7.8	7.9	.65	2.2	10.75
Viners	12.1	10.1	3.8	.10	1.1	5.0
Lyle Ship.	18.6	115.9	104.6(*)	.02	19.2	124.02

(*) estimated :		
	Fixed Assets (Annual Report)	87.1
	less shortfall	29.2
	add unsec. creditors (Statement of Affairs)	46.7
	Total Estimated Claims	104.6

The turnover of Rotaprint, Viners and Lyle Shipping in their last published accounts ranged from £12.1 million (for Viners) to £18.6 million (for Lyle Shipping). The book value of total assets on the published accounts prior to insolvency varied between £7.8 million for Rotaprint to £115.9 million for Lyle Shipping. In all cases the shareholders lost the value of their shares. In the case of Lyle, even the secured creditors lost one third of their claims. Only Rotaprint was able to satisfy some of their unsecured creditors' claims.

In all three companies the financial creditor persuaded management to file for insolvency. The relationship between management and the financial creditor influenced the timing of the bankruptcy. A high

degree of mistrust in the ability of management to turn the company around, together with its less secured status as creditor led Midland Bank to abandon its backing of rescue plans of Viners. This resulted in an early liquidation and in the destruction of 50% of the book value of assets. The financial creditor for Rotaprint, again Midland Bank, waited for more than two years before he intervened. Finally, the attitude of the main financial creditor in the case of Lyle Shipping is quite unusual. Despite public warnings from the auditors, the company collapsed only after a secured creditor refused to reschedule his debt claims. One would have expected the holder of a floating charge to take charge of the company much earlier, when the auditors reports came out.

The administration or direct cost of the insolvency was largest for Rotaprint with more than 8% of total assets. The costs of liquidating Viners and Lyle Shipping were less than 1%. This is largely due to the secured assets being seized by creditors themselves and not being disposed of by the liquidator of the unsecured creditors. Against turnover, these costs are even less relevant. For Rotaprint these costs amount to less than 5% of its pre-insolvency turnover. For the other two firms these direct costs are less than 1% of turnover.

On the whole, the direct costs of all three insolvencies were very small in comparison to the actual losses. The creditors' losses compared with their original claims amounted to little more than 40% in the most solvent company, Rotaprint (13). This does not incorporate any losses accrued to the government in form of unemployment or compensation to the laid-off workforce.

NOTES :

(1) Cork Gully, Letter to all known creditors 29.4.1988

(2) Unlike the German banks, the UK banks tend to supply short term capital only.

(3) Yorkshire Post 29.4.1971

(4) Financial Times 8.9.1981

(5) Hardware Trade Journal,7.5.1981

(6) Financial Times 24.7.1982

(7) Financial Times 12.8.1982

(8) Financial Times 27.9.82

(9) A detailed account of the history of the Lyle Shipping company can be found in Orbell, Green and Moss (1978).

(10) Financial Times 18.4. and 16.5.1987

(11) Financial Times 18.4.1987

(12) Claims which were unpaid after liquidation was completed are calculated as follows (in £000):

Total Creditors' Claims	3,824
Receiver /Liquidation Fees	96
Additional Liquidation Costs	70
Total Claims	3,990

less	
Estimated Realised Assets :	
Pledged	1,836
Liquidated	601
Total Estimated Realised Assets	2,437
Net creditors' claims	1,553
	=======

Source : Viners Statement of Affairs

(13) Comparison of losses is shown in chapter 8

CHAPTER 8 COMPARISON OF CREDITORS' LOSSES, CONCLUSIONS AND RECOMMENDATIONS

8.0 INTRODUCTION

This final chapter presents the comparison and analysis of losses suffered by creditors in bankruptcy in both countries. The conclusions of this thesis can be summarised in six main points:

1. **Losses suffered by creditors in bankruptcy in both countries are substantial** when measured against pre-bankruptcy book value of assets or turnover. They have been rising over time. These losses arise primarily in the form of substantial reductions in the value of the creditors' claims rather than in the form of administrative or direct costs. This supports the finding of Altman (1984) for the United States. There are marked differences in the frequency of bankruptcy and the distribution of losses suffered by creditors in bankruptcy in the two countries.

2. **In Germany, the main reason for these large losses is the large number of claimants and the complexity of contracts between them.** The resulting uneven distribution of information causes untimely and delayed filing for bankruptcy and contributes to the limited availability of market solutions such as mergers and take-overs.

3. **For the UK, the main cause of large losses suffered by creditors in bankruptcy lies in the inability to write efficient contracts between agents and shareholders.** Also, the claimants in an insolvency case are often unable to agree on a policy optimal for all, a symptom described by White (1980) as the 'me first' priority rule. In both countries the law will compensate some of the disadvantaged claimants, but the extent of the compensation differs between the countries.

4. **In Germany, a large proportion of the losses is met by the tax payer.** The taxpayer pays for the outstanding claims of employees, tax and social security institutions. In addition, industry pays for the shortfall in pension claims through an insurance system. The case studies show that even the financial creditor will at times be burdened with the cost.

5. **Losses in the UK are largely borne by the creditors.** However, some of the losses are financed by the taxpayer.

6. **The differences in the distribution of losses together with differences in the respective corporate structures between the two countries lead to differences in the respective costs of capital.** This in turn fosters unequal competition and can be expected to pose problems for capital market integration for UK companies.

This chapter is divided into three parts. The first part analyses the evidence pointing to the significance of losses suffered by creditors in bankruptcy, the probability of bankruptcy and the differences in the distribution of these losses in the UK and Germany. This substantiates the first point of the above summarised conclusions. Details of this evidence have been presented in chapters 4, 6 and 7.

The second part deals with the inefficiencies of the respective financial systems which cause these high losses. This part refers primarily to the details given chapter 5.

The third part evaluates the implications of the two different bankruptcy frameworks in respect to the currently expected

amalgamation of the two markets in 1992. Given that there are significant structural differences in losses suffered by creditors in bankruptcy and their distribution, one must ask whether these are seen to be impediments to the proposed market integration. Can a different distribution affect market entry and international competition? As outlined in Point 6, the answer is yes. These differences result in the German companies achieving a lower cost of capital than their UK competitors. UK companies will be disadvantaged in an integrated market compared to their German counterparts.

8.1 ANALYSIS OF LOSSES SUFFERED BY CREDITORS IN BANKRUPTCY IN THE UK AND GERMANY

The results of the statistical chapter 4 and the case study chapters 6 and 7 can be summarised as follows. Firstly, losses in bankruptcy in both countries are significant when comparing pre-bankruptcy and post bankruptcy financial data. Secondly, the major part of these losses are not related to the mechanics of the bankruptcy process such as legal and filing costs (administrative or direct costs) and thirdly, there are major differences in the distribution of these losses between both countries.

There are problems in the direct statistical comparisons as was noted in chapter 4. Some of these problems are, however, overcome here by comparing the individual cases in chapter 6 and 7.

8.1.1 SIGNIFICANCE OF LOSSES : STATISTICAL EVIDENCE

Official statistics show that between 1977 and 1987, company bankruptcies almost doubled in the UK and Germany. For the UK the statistics published for 1987 show 11,182 company bankruptcies

while for Germany the figure is 12,098 (Table 8-1). While the German statistics include small traders and partnerships, the UK statistics include this group in the individual bankruptcy statistics. The consequent statistical adjustments in chapter 4 increased the total number of company bankruptcies in the UK to 16,800.

Comparing the number of company bankruptcies in the UK with those in Germany, one can conclude that bankruptcies were 39% higher in the UK than Germany in 1987 (1). Based on the company registrations of both countries this means that 1.14% of all VAT registered companies in the UK failed. For Germany this figure is only 0.6% of all registered companies.

TABLE 8-1 COMPARISON OF BANKRUPTCY STATISTICS : UK AND GERMANY

	UK	Germany
Number of Company Bankruptcies 1987 (*)	16,800	12,098
of which Unlimited Liability Company Bankruptcies (1986) (**)	27%	80%
Number of VAT Registrations (1986) (**)	1,468,000	1,908,060
of which Unlimited Liability Companies (1986) (***)	38%	82%
Number of Company Failure as % of VAT Registrations	1.14%	.6%

(*) chapter 4, table 4-1 & 4-2
(**) chapter 4, table 4-2, table 4-8 & table 4-10
(***) chapter 4, table 4-11

Comparing the distribution of company failures, the figures show that about 27% of all UK failures are found in the unlimited companies sector. The comparable figure for Germany is 80% (2). The result is not surprising since only 40% of all companies in the UK

have unlimited liability status. In Germany more than 80% of all registered companies have unlimited liability.

In both countries the unlimited liability sector shows a relatively lower bankruptcy rate than the limited liability sector. For the UK the difference is especially large.

In terms of total payments, creditors of failed unlimited liability companies have a greater chance to succeed in their claims than those of limited liability companies. While the available statistics as shown in Table 4-5 of chapter 4 only apply to Germany, a similar result for the UK is quite probable.

In the limited liability sector it appears that the privately held companies have a higher failure rate than the publicly quoted limited liability companies, though precise figures are only available for Germany (table 4-11, chapter 4).

Very few statistics on aggregate losses suffered by creditors in bankruptcy are available. This leads to using the figures on numbers of bankruptcies as proxies for size and growth of losses in bankruptcy. However, the organisation analysing the overall losses in bankruptcy for Germany, the Creditreform Association, estimates the losses for 1986 to be around 25 billion DM (Table 4-6, chapter 4). In addition, the growth rate of losses in both countries has consistently exceeded the growth rate of the respective nominal national products and, despite economic recovery, there has not been a corresponding reduction in losses suffered by creditors in bankruptcy. For Germany, liabilities of failed companies increased three-fold between 1978 and 1985 while in the UK they quadrupled (3). In their commentary articles the German Statistical Office and the independent Creditreform Association have voiced their concern over this imbalance (4).

More detailed loss figures are needed to analyse the overall extent of the increases. The available figures, however, substantiate the first conclusion, that losses suffered by creditors in bankruptcy are significant in both countries and have been rising over the last 10 years.

8.1.2 DIRECT COSTS

The figures for the UK and Germany support the empirical findings for the US presented in chapter 3. Direct costs or administrative costs of bankruptcy are the smallest, and therefore most insignificant portion of total losses suffered by creditors in bankruptcy.

In the UK, the receiver charges between 5 and 10% of the sales value of the assets. The liquidator charges around 22% of the break-up value. The break-up value is frequently only a fraction of the actual book value prior to bankruptcy. If this fraction stands at a ratio of break-up value to book value of 1:10 the actual liquidator's charge is no more than 2.2% of the pre-bankruptcy asset value. This is supported by the Viner's case study. Direct costs for Viner's amounted to less than £100,000 against pre-bankruptcy assets of more than 10 million. The same is true for the fees charged by the receiver. The pre-bankruptcy book value of assets relates to the post-bankruptcy asset value at a ratio of at least 2:1. The actual fees charged by the receiver on the basis of pre- bankruptcy book values are less than 5% of the asset value of the company prior to bankruptcy.

Similar results are obtained for Germany. Though the courts decide the appropriate remuneration, liquidator fees are comparable. The Beton- und Monierbau case shows total fees of 11.8 million marks for direct costs against total claims of 1,150 million marks. At

just over 1% of total claims, the costs appear very small and are unlikely to affect any capital structure decision prior to bankruptcy.

8.1.3 LOSS OF CLAIMS' VALUE

Far from trivial, however, are the losses of the value of creditors' claims. Comparing the book value of claims of a bankrupt company with its realised liquidation value, there are some significant differences. For the UK, the average net coverage ratio is 24.2% for small bankruptcies (Table 4-7, chapter 4). In this case, almost one-quarter of the book asset value is recovered from the sale of the assets by preferred and unsecured creditors. As for the actual case studies the result is shown in Table 8-2.

The highest coverage was achieved by Rotaprint which was rescued in receivership. The lowest coverage occurred in Lyle Shipping. The case of Lyle is the exception in so far that a large amount of claims originated from previously secured creditors. Here the secured assets were insufficient to cover their claims. Another large claimant in the Lyle case was the floating charge holder, The Royal Bank of Scotland. There were very few unsecured creditors. If one applies the assets available for distribution solely to the original unsecured creditors, all claims would have been satisfied (see Table 7-17).

Losses for German unsecured and preferred creditors are larger than those for the UK. The average coverage ratio for these creditors is 8.75% with the preferred creditors receiving 30% of their claims and unsecured creditors receiving 4.3% (5). While there are some disparities in size of the UK and German cases, it nevertheless appears that the losses sustained by the German creditors are larger than those of their UK counterparts. This is particularly

TABLE 8-2 COVERAGE OF LIABILITIES - UK

excluding secured assets and debt

	Book Value of Claims in £	Realised Value of assets in £	Coverage
Rotaprint (*)	5.5 million	3.1 million	56%
Viner's (**)	2.6 million	.84 million	32%
Lyle Shipping (***)	46.4 million	.32 million	.7%

(*) see Table 7-5 :

total liabilities & capital	10.1 m	total assets	5.4 m
less secured liabilities	2.4 m	less secured	
equity capital	2.2 m	(net)	2.3 m
	-----		-----
	5.5 m		3.1 m

(**) see Table 7-9 :

total liabilities	4.8 m	total assets	2.0 m
less secured liabilities	1.2 m	less secured	1.2 m
equity capital	1.1 m		
	-----		-----
	2.6 m		.842m

(***) see Table 7-17:

total liabilities & capital	65.8 m	total assets	.32 m
less equity capital	16.2 m	(unsecured)	
	------		-----
	46.6 m		.32 m

evident if one looks at the average coverage figure for all bankruptcies between 1978 and 1985 of only 8.75% (Table 4-6a, chapter 4) compared to over 24 % (Table 4-8, chapter 4) for the UK. There is also some evidence of this difference in coverage when comparing the case studies. The unsecured creditor in Germany has a lesser chance of recovering his claims than his counterpart in the UK. With the exception of Lyle Shipping, where a large proportion of secured creditors was reduced in their priority ranking, the case studies show the marked difference between UK and German coverage ratios.

Coverage ratios for preferred and unsecured creditors do not give

TABLE 8-3 COVERAGE OF LIABILITIES - GERMANY

	Book Value of Claim in mil. DM	Realised Value in mil.DM	Coverage
Beton - und Monierbau (*)	690	99	14%
AEG (**)	7,200	2,976	41%
PHB Weserhuette (***)	462	133	29%

(*) unsecured and preferred claims DM 690 million, assets against unsecured and preferred claims DM 99 million (see Table 6-5). The coverage ratio for unsecured only was estimated to be 5.3% , (Handelsblatt 5.7.79).

(**) Reorganisation : total indebtedness amounted to DM 7.2 billion of which DM 1.3 were secured. The actual amount written off was 4.224 billion DM see chap.6, note 39. The figure here included some secured debt. Since negotiations during the reorganisation eliminated the differentiation between secured and unsecured debt, the figure of DM 7.2 billion should be used as unsecured debt.

(***) Unsecured amounted to DM 382 million, preferred claims which were paid to DM 68 million. Distributable assets were DM 65 million net of the assets of DM 68 million paid for preferred claims. The company had little secured debt at the time of its collapse.

information about the percentage of assets which are secured. If creditors in one country were to secure a larger proportion of assets than their counterparts in another country, then differences in the coverage ratios of preferred and unsecured claims would not represent a difference in total costs. However, the secured creditors in the UK and Germany secure a similar proportion of assets even though their composition is different. Table 4-19 in chapter 4 shows the composition of creditors for both countries in percentage terms. For the German GmbH, for example, the category of secured creditors consists of long term financial creditors and

trade creditors. A total of 18% of assets are secured by claims. In the UK, secured creditors are found in the categories of long and short term bank loans. Here the amount of assets secured comes to 19% of total assets. The difference between the two countries is 1% which is negligible.

TABLE 8-4 LOSSES BY CREDITORS

	UK	Germany
a. Claims Secured by Assets & Recovered	19%	18%
b. Preferred and Unsecured Claims Recovered after liquidation (*)	20%	7%
c. Total Rate of Recovery of Claims (**)	39%	25%
d. Losses through Bankruptcy as percentage of total claims	61%	75%

(*) Percentage of preferred and unsecured claims/total claims times coverage rate:

	UK	Germany
% preferred + unsecured debt/total debt	81%	82%
coverage	24.2%	8.75%

(**) addition of (a) and (b)

We now assume that the average bankrupt firm in Germany and the UK had been financed similarly to the average GmbH or limited liability company several years prior to its insolvency. Knowing the average coverage rate for the bankrupt company in each country, we can assess the losses suffered by creditors in bankruptcy. The result is shown in Table 8-4. At the time of bankruptcy about 75% and 61% of the total original values of companies in Germany and the UK respectively were lost.

This result supports the previous findings that the financial loss to claimants in Germany is larger than in the UK. The loss results primarily from the reduction of asset values during the liquidation. Indirect costs are therefore shown to be quite significant for the two countries.

Finance theorists claim that in an efficient market the losses may be covered by the higher risk premium charged for the loans prior to the company going bankrupt. The figures for credit terms and costs raise questions about this hypothesis, though there is wider scope for charging risk premia in the UK than there is in Germany. Assessing the credit terms and credit costs of Table 5-5 in chapter 5, the comparative interest spreads in the UK are consistently larger than in Germany. In 1987, the maximum spread allowed for risk premia in Germany was 2.5 point which was for overdrafts. The maximum spread in the UK occured in the category 'variable loans' and amounted to 5.5 points. There can be little doubt that German banks are less protected against default through built-in risk premia than the UK banks.

8.1.4 DISTRIBUTION OF LOSSES AMONG BY CREDITORS

There are marked differences in the distribution of losses between the UK and Germany, which are described in detail in chapter 5.

The UK limits the losses largely to the creditors involved. Some groups such as employees and sometimes small subcontracting businesses are protected to a limited degree. The employees may receive a certain portion of their outstanding wage claim. Unpaid private pension obligations, however, become the loss of the employees. By giving creditor groups such as employees, the insurance organisations, pension funds and internal revenue services priority ranking, some protection is afforded but only if the bankruptcy assets are sufficient to pay off the preferred creditors which is not always the case.

Losses carried by the general public and industry in German bankruptcies are much larger. These losses are paid for by two bodies. The government will fund some of the shortfall directly. In addition, an insurance system will make up some of the rest. Not only are the losses for preferred creditors higher in Germany, but the tax payer pays more compensation which helps reduce the total losses to groups such as employees. Outstanding wages, social security claims and their non-company pension rights are paid in full. In addition, unsecured creditors are entitled to grants from the regional fund to avoid financial distress. While the German government does not compensate the losses of the financial institutions in general, the Bundesbank acts as lender of last resort for the banking system.

Special insurance funds in Germany compensate for losses of the company pension fund which is used to fund the company's assets. There is also a partial insurance fund for share losses incurred

by shareholders of publicly quoted companies.

The distribution of losses suffered by creditors in bankruptcys in the UK is largely limited to shareholders and creditors. In Germany, the main paymaster of these losses is the tax payer and commercial companies (through the insurance system).

8.2 CAUSES OF LOSSES SUFFERED BY CREDITORS IN BANKRUPTCY

In perfect capital markets, losses suffered by creditors in bankruptcy are known by the market participants and fully priced, as was detailed in chapter 3. In countries where losses suffered by creditors in bankruptcy are significant and can not be priced, market inefficiencies exist. The evidence presented for the significance of losses suffered by creditors in bankruptcy in the UK and Germany leads to the conclusion, that there are inefficiencies in both capital markets.

There is also evidence, that market inefficiencies in the UK and Germany are of different natures. The analysis of the differences in corporate structures and equity markets in chapter 4 shows, that the inefficiencies in the UK centre on the unresolved conflict between owners, creditors and agents. This gives rise to unpriced agency costs. The evidence on credit information in chapter 5 does not suggest that information is unevenly distributed among the UK claimants. Nor is there any evidence in the case studies to that effect.

In Germany, conflicts between the parties, which might give rise to unpriced agency costs are resolved through a complicated network of legal relationships of claimants, agents and owners. Market inefficiencies here arise from the uneven distribution of information among claimants rather than through agents. This is

documented in chapter 5 and highlighted in the case study of Beton und Monierbau, where the liquidator sued the Housebank involved for acting on information to the detriment of other claimants.

The distribution of the losses suffered by creditors in bankruptcy is determined by the legislation in both countries. In Germany, however, the legislation seems to recognise its inability to eliminate these inefficiencies by compensating those claimants disadvantaged by it, such as employees and small subcontractors.

8.2.1 COMPARISON OF CORPORATE FINANCIAL STRUCTURES AND EQUITY MARKETS

In the UK, and to a lesser extend in Germany, the proportionally largest share of company failures occurs within the limited liability type of company as was shown in chapter 4. Company failures in the limited liability sector are also more costly to the claimants. This suggests that the usually smaller unlimited liability companies in trouble either seek assistance from their creditors earlier, or liquidate at a more optimal time.

Limited liability companies in both countries have more formal corporate structures. The main differences between the UK and Germany with respect to corporate structure can be found in the roles of the following three groups.

a. Creditors, including banks and trade creditors,

There is a much stronger reliance on bank finance in Germany than in the UK. German banks will initially advance funds on an unsecured basis. But they have such a superior information network through their close relationship with the customer, that any coming insolvency difficulty can be detected in its early stages and

measures can be taken against it.

UK banks tend protect themselves better against default of their debtors through the mechanism of a fixed and floating lien on almost all types of loans. This mechanism allows banks to have an advantage in determining the timing of insolvency. Viner's eventual liquidation was the result of the bank's unilateral decision that its investment was at risk.

Trade creditors in Germany protect themselves by standard contracts, which specify immediate priority in the case of default. In addition, there is an insurance scheme which protects the trade creditor from the default of its debtor. Trade creditors in the UK have generally no priority claims over the banks' liens.

b. Employees

The most important differences between the UK and Germany are the positions of the employees and the banks. Not only are German employees represented on the Supervisory Board and participate actively in all corporate decisions, they are also the one of largest groups of creditors of the company. As such they also greatly influence the decision to declare bankruptcy.

c. Shareholders

In Germany, a large part of corporate funding comes from the employees in the form of company pension and social security payments, which form part of the employment contract. The need for equity capital is therefore less than in the UK. While pension payments in the UK are made to independent pension funds, which in turn may invest in the company via the stock market, no such arrangements are available in Germany. The lower demand for equity funding in Germany limits the power of shareholders to determine

corporate policies.

The relatively lesser importance of equity capital in Germany may contribute to the fact that market solutions to the problem of company insolvency such as takeovers or mergers may not be available. While the smaller equity bases of German companies should facilitate the purchase of its equity, their special corporate structure involves the financial institutions and the employees in decision making and precludes certain pre-bankruptcy market solutions available in the UK. This may be a contributing factor to higher average losses particularly in the larger corporations.

8.2.2 FINANCIAL STRUCTURES AND LOSSES IN BANKRUPTCY

Given the significance of losses suffered by creditors in bankruptcy and the nature of the different corporate capital structures of the two countries, the causes of the inefficiencies centre around two factors : the problem of motivating agents to act in the best interest of the firm's shareholders and the problem of even distribution of information which allows all claimants to pay for the risk they initially contracted for.

8.2.2.1 AGENCY COSTS

Agents in Germany are restraint from imposing large costs on the firm by a multitude of factors. Firstly, the bankruptcy laws require agents to adhere to specific filing procedures. Secondly, the composition of the supervisory board forces agents to give equal access to management information to financial creditors, shareholders and employers equal access to management information. And thirdly, mangement must communicate a significant share of

internal operational information to the Betriebsrat, the worker's council. Because of the status of the individual claimant groups in German companies, the German agents must act on behalf of a whole variety of interest groups. Therefore, agency costs in bankruptcy are irrelevant and do not play any role in the bankruptcy decision or the distribution of its losses.

In the UK, where the company is dominated by mainly two parties, the debt holder and the equity holder, the role of the agent is of greater importance. Here, the agent is instrumental in the bankruptcy decision and his motivation to act in the best interest of the shareholder becomes a prime consideration. While the UK case studies do not directly address themselves to the problem of agency motivation and cost, the Lyle Shipping case demonstrates that bankruptcy might have occurred at an earlier stage had it not been possible for the agents to delay such a declaration (6).

8.2.2.2 INFORMATIONAL ASYMMETRIES

The losses arising from informational asymmetries differ in the two countries. In the UK there is little evidence that informational asymmetries exist. There is little necessity for the British financial creditor to be as well informed as his German counterpart since loans in the UK by the financial institutions are only advanced when secured by at least a floating lien.

In Germany, the information advantage is extremely important to the financial creditors. Financial creditors do not secure their short term advances unless they feel that their claims are in danger of being lost through default. The case of Beton-und Monierbau indicates that banks are able to act to their advantage on such information, and are able to delay the bankruptcy decision until they have either secured their claims or sold them to some

other claimant (such as the state). That this is a common problem has also been highlighted in the report on bankruptcy (7) which in its findings, emphasises that banks are the group least likely to lose their claims in the case of their debtor's bankruptcy.

The role of German and UK banks in the insolvency of their debtor companies differs significantly. While both in the UK and Germany the banks may be instrumental in precipitating insolvency and thus bankruptcy, the relationship between the receiver or liquidator and the banks differs between the two countries. In the UK, this relationship is very close. The receiver or liquidator acts on behalf of the bank. In Germany, the liquidator acts on behalf of all creditors, though in practice this is restricted to non-financial creditors. He is appointed by the courts and his relationship to the creditor banks is very distant and in many cases adversarial. The German banks take little active interest in the proceedings after bankruptcy has been declared. Their main activity lies on managing and influencing the events prior to bankruptcy.

8.2.3 THE EFFICIENCY OF LEGAL INTERVENTION

The increasing frequency of bankruptcy and ever increasing losses suffered by creditors in bankruptcy in both countries must lead to the conclusion that the role of the legislation as a regulator of market efficiency has failed in both countries. Changes in the corporate structure which increased the number of claimants, have not always been accompanied by corresponding changes in the bankruptcy laws. The historic problem of the distribution of losses suffered by creditors in bankruptcy continues to be troublesome for the legislature.

The question is whether some claimants can be disciplined better through legislation or through the market and caused to act in such a way, that the welfare of all claimants is maximised. Clearly, the old laws have not taken fully into account the development from the two-party firm to the multi-party firm. In the case of Germany, stop-gap solutions such as protecting some creditors by raising their rank to that of preferred creditors secured by the state have only succeeded in delaying the timing of bankruptcy and have resulted in moving the losses suffered by creditors to society in general.

In the UK, the self-regulatory system of the receivership has frequently disadvantaged smaller creditors by precipitating a hurried liquidation without properly allowing a reorganisation process to take place. This can be clearly seen from the case studies of Rotaprint and Viner's, where the financial creditor seized the company at a time when it was convenient for himself.

This is the reason why in the UK the bankruptcy laws have undergone major changes. In Germany, a new set of bankruptcy laws have been proposed, but they have yet to be submitted for parliamentary approval. Both laws recognise the need for containing the frequency of and losses suffered by creditors in bankruptcy, but their respective solutions to the problem differ. In the UK, the new legal framework is designed to facilitate reorganisation but leaves the mechanics of it up to the individual claimants. Its main aim is to prevent some creditors from calling in their claims and thus necessitating the dissolution of the company. Constraints on these claimants are voluntary and it has yet to be seen, whether this option yields the desired results. The new German bankruptcy laws - if and when they come into force - call for the partial elimination of the protection of secured creditors. This will prevent the banks from changing their unsecured status to a secured one when insolvency of the debtor is threatened. It is designed to

force financial creditors to pursue a more timely bankruptcy policy and to allow reorganisation procedures to take place at a time, when the company can still be rescued.

The UK proposal promotes the self-regulating market solution while the German proposal emphasises state regulation. In future, further investigation should concentrate on whether the two different solutions can co-exist side by side in a world, where companies operate less and less from one national base. In addition, can such fundamental differences exist within the European Single Market without one system allowing its companies a distinct advantage over the other?

8.3 IMPLICATIONS FOR 1992

In an integrated market as is envisioned in 1992, UK companies may find themselves disadvantaged by two factors : by their higher costs of capital due to higher losses suffered by creditors in bankruptcy and by the short term outlook which is forced on management through the prevailing corporate structure as detailed in chapter 4.

8.3.1 COST OF CAPITAL

As argued, German corporate creditors are able to shift the portion of their losses suffered by creditors in bankruptcy to those groups which receive compensation from the taxpayer. While losses suffered by creditors in bankruptcy in Germany are large, the corporate cost of capital in Germany is not significantly affected by their existence.

UK corporate creditors are not able to transfer their cost portion to other groups of creditors. Losses suffered by creditors in bankruptcy are therefore a substantial part of their cost of capital. Thus, the differences in the distribution of losses suffered by creditors in bankruptcy lead to differences in the respective costs of capital.

As a consequence, funds for a German company are cheaper since bankruptcy risk premia are shared by society. Society effectively subsidises interest rates for companies. The combination of cheap finance and the resultant ability to invest on a more long term basis must make the German company more competitive to its UK counterpart in a single market.

8.3.2 THE CORPORATE STRUCTURE

The more widespread multi-party system in Germany, as described in chapter 3, may also affect competition between the two countries.

Any takeover or merger of German companies goes through a process of approval from all parties, shareholders, banks, employees and even large suppliers, before it can be executed. Each party has the power to prevent or at least delay such company amalgamation. Reductions in profits or even the threat of bankruptcy may result in a fall in the share prices but does not open the way to these types of market solution.

UK companies are more susceptible to takeover bids, whether invited or not. While such market solutions may preserve wealth which would otherwise be destroyed in a potential bankruptcy, the ease with which such solutions may be forced on the company must make these companies more sensitive to variations in short term profits. Such attention to maintaining short term profits may be achieved only

at the expense of long term investments. This may mean that ventures which do not achieve sufficient short term profits are not undertaken by UK companies. The removal of the threat of takeovers by outside companies allows German companies to pursue longer term investments than their UK counterparts.

Losses suffered by creditors in bankruptcy and its distribution are indicators of the structure and workings of capital markets and legal systems. In a single market, there cannot be a situation where certain members receive interest subsidies which are not available to others. Such distortion would result in a competitive disadvantage for the non-subsidised member. In a single market, the differences in the interest groups which influence corporate structure and decision making will result in differences in the strategic approach to investment decisions. This works in favour of the German type of corporate structure.

The two different legal and corporate structures may work individually. In an amalgamated market, they are likely to create a climate which favours the German company at the expense of its UK counterpart.

While this hypothesis is significantly substantiated within the framework of this thesis further research into actual case studies is needed to verify the magnitude of the different national cost distributions. Also, the implications for the respective costs of capital need to be defined and measurements of the precise effect of differential losses suffered by creditors in bankruptcy in a single market require further investigation.

Notes :

(1) The figures for 1987 are : 16,800 in the UK and 12,100 in Germany.

(2) see : Table 11 chapter 4 and Table 1, the figures are calculated as follows : Germany 1986: Company failure minus AG (18) and GmbH (7013) divided by total bankruptcies of 13500. UK 1986: Unlimited 5200, limited 14405.

(3) The supporting figures relate only to the unlimited liability companies. There has also been a fall-off in the total bankruptcy rates in the years 1986 to 1987.

(4) see: Creditreform, Jahresbericht 1987; Wirtschaft und Statistik, Reihe 3, July 1987 and July 1988.

(4) The comprehensive figures for the UK companies are given in the Tables of Chapter 7.

(5) Par values per share average 50.00 DM.

(6) see : Table 4-13, chapter 4

(7) see : Gessner, Rhode, Strate, Ziegert (1978).

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