

Franke, Günter

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## Inside information in bank lending and the European insider directive

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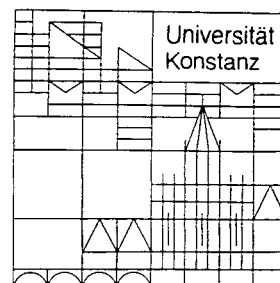
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**Sonderforschungsbereich 178**  
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Diskussionsbeiträge



Juristische  
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Günter Franke

**Inside Information in Bank Lending  
and the European Insider Directive**

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**INSIDE INFORMATION IN BANK LENDING  
AND THE EUROPEAN INSIDER DIRECTIVE\***

**Günter Franke\*\***

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\* *Revised Version*  
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\*\* Professor of International Finance  
Faculty of Economics and Statistics  
University of Konstanz  
D-7750 Konstanz 1

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## Abstract

The European Community has passed the European Insider Directive which prohibits insider trade in common stock and debt securities. Hence banks are not allowed to sell debt securities when they receive unfavorable inside information on their borrowers.

Until now, German banks have not only been allowed, but even have been expected to collect inside information and to react fast on unfavorable information to protect their solvency and hence the stability of the financial system.

This paper analyses the effects of the EC - Directive on bank lending and finds that the substitutes for selling debt securities appear to generate a higher social cost than the sale of debt securities. Therefore banks should be granted the privilege to sell debt securities on unfavorable inside information.

## I Introduction

On June 19, 1989 the Council of the European Community has passed the European Insider Directive. This directive requires each member state to prohibit any person who knowingly possesses inside information <sup>1)</sup>, to profit from this information by trading transferable securities with the involvement of a professional intermediary.

Transferable securities include shares, debt securities, and, in addition, futures, option and index contracts in respect of these securities. Thus the directive prescribes a strict insider regulation, certainly much stricter than the present West German regulation. The current German regulation is not based on a law, but on voluntary agreements in labor contracts to observe the "Insiderrichtlinien" and the "Händler- und Beraterregeln". Thus the German regulation appears to be weak as compared to the regulation in the United States of America and the United Kingdom (Hauschka/Harm [1988]). Although the literature presents arguments in favor of and against restrictions on insider trading, public opinion has moved towards fairly strong restrictions. This is reflected in the EC-directive.

This paper discusses the implications of the European Insider Directive for banks. In the universal banking system banks may trade all kinds of securities, subject to national regulations such as solvency regulations. Banks in Germany, for example, are heavily involved in trading securities on their own account. As much as this trade is not related to the bank's role as a financial intermediary, there is no reason to differentiate insider regulations for banks and non-banks. Banks may, however, trade securities also as part of their financial intermediation function. As financial intermediaries they enjoy various privileges in order to protect their solvency and the stability of the financial system. Therefore the question arises whether the banks' privi-

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1) The Directive defines "inside information" as information which has not been made public of a precise nature relating to one or several issues of transferable securities or to one or several transferable securities, which, if it were made public, would be likely to have a significant effect on the price of the transferable security or securities in question (Art.1)

leges in financial intermediation should encompass some privileges in insider trading, too.

As financial intermediaries, banks receive deposits and lend money. Conventional bank loans are not securitized. Thus trade of these loans is the exception. If they are traded, then they are usually traded among banks, they are not sold to the public.

But in the first half of this decade there has been a strong trend towards securitization which primarily concerned debt financing instruments (table 1). With increasing competition between commercial and investment banking and its intermingling in Anglo-saxon countries, conventional loans lost ground to securitized loans which are transferable at lower cost. Often these securities are traded on some securities exchange.

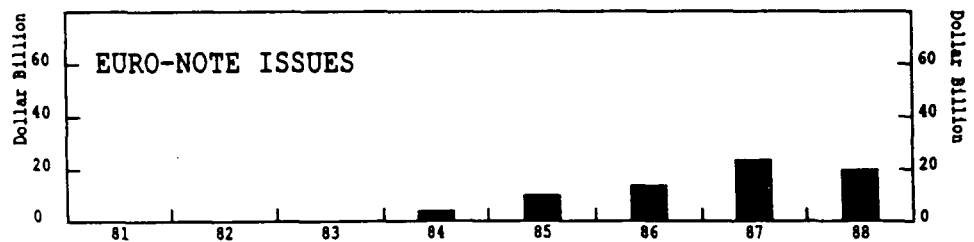
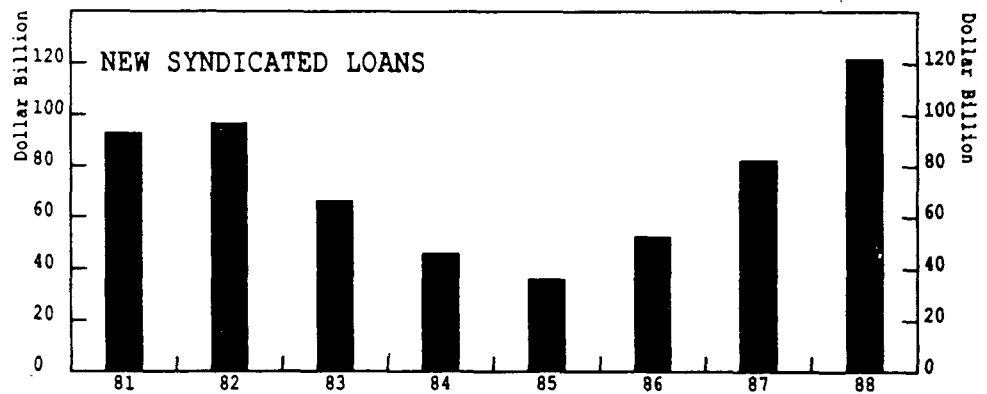
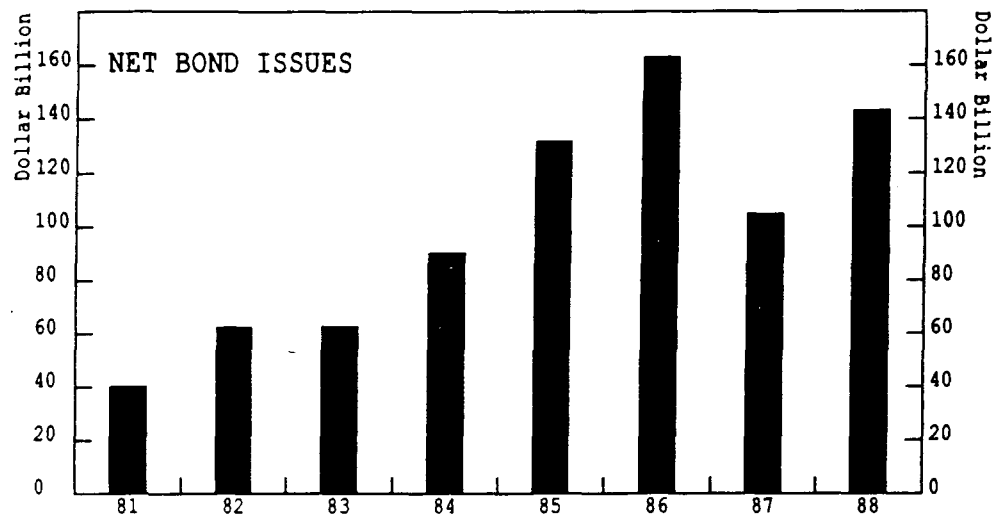
In addition, new financing instruments emerged which are based on securities. Examples are revolving underwriting facilities, note issuance facilities, certificates of deposits, commercial paper. Finally, convertible bonds and option bonds have gained importance as financing instruments. Although the trend towards securitization may have been stopped in the second half of this decade, a substantial volume of new bank loans still is securitized.

The EC-Insider Directive prevents banks which have lent money through debt securities, from trading these securities on inside information. Hence the directive prevents banks from reacting fast on bad news by selling the securities and thereby protecting their solvency. This is a novel feature in banking regulation which contrasts with the existing banking regulation.

As mentioned before, banks are commonly considered as the most important pillars of the financial system and are granted certain privileges to support the stability of the system. Banks are expected to thoroughly screen their loan applicants and, once they have granted a loan, to monitor the borrowers closely. In the case of a deterioration of the borrower's rating, banks are expected to react fast in order to protect their own solvency. Screening and monitoring rely on public information and fast processing of this information; but more important is the inside information which banks derive from visiting the borrowing firm and discussing business policy with managers. Thus banks act heavily on inside



Table 1



#### BORROWING ON THE INTERNATIONAL CAPITAL MARKETS

Source: OECD, Financial Market Trends 42 (February 1989), p. 7

information. Nobody has questioned this so far.

Until now the German insider regulation prevents German banks from using inside information only in trading equity and equity-related claims such as convertible bonds. Thus the use of inside information in lending business is not restricted<sup>2)</sup>. On the contrary, it is expected as part of a prudent lending policy<sup>3)</sup>.

The EC-Insider Directive departs from this reasoning by prohibiting banks to trade debt securities on inside information. Apparently the social cost of this trade is ranked higher by the European Community than its benefits. The purpose of this paper is to discuss the social costs and benefits in detail. It will be shown that the substitutes for debt securities selling, employed by banks, may generate higher social costs. If, for example, a bank calls a loan on unfavorable inside information, then this may create a higher wealth transfer to the bank than a debt security sale. Therefore if wealth transfers based on insider action are considered socially undesirable, debt securities sale is preferable to a loan call in this respect. As banks need the right to act fast on unfavorable inside information, the paper concludes that banks should be allowed to sell debt securities on unfavorable inside information anonymously on a securities exchange. This does not imply that banks should be granted the right to engage in other types of insider trading.

This view will be presented by discussing briefly the bank's role in the lending process in section II. The third section describes substitutes for selling debt securities on unfavorable inside information. The economics of debt securities selling and its substitutes are analyzed in section IV. The main results are summarized in the conclusion.

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2) For a more general discussion of banks' insider trading see Hopt [1975, 499-501].

3) Another privilege of German banks protects their inside information. By §26a Kreditwesengesetz, German banks can undervalue their assets on the balance sheet and thereby create hidden reserves which can be dissolved in unfavorable times. Thus it is much more difficult for outsiders to find out "true" profits of banks than of other firms.

## II The Bank's Role In the Lending Process

The bank's role in the lending process will be sketched first. The bank acting as a financial intermediary between borrowers and lenders can survive in a market economy only if it reduces the overall transaction costs of lending (Baltensperger/Milde [1987, pp. 1-6]). In a world of uncertainty with asymmetric information a financial intermediary can save transaction costs if he specializes on collection and evaluation of information to reduce default risk, and reduces it even more by diversification.

### 1 Reduction of Transaction Costs in Lending

Usually banks collect relatively small deposits from many depositors and lend this money in greater amounts to borrowers, primarily firms. Thus banks transform small lots into greater ones. This transformation saves administration costs of lending which include the cost of screening loan applicants, monitoring borrowers and taking appropriate action in the case of new information. The cost savings of banks are due to the banks' specialization in the lending business. In addition, there exist strong economies of scale-effects. The administration cost of a credit contract grows much less than proportionately with the credit volume. One contract over  $x$  DM costs much less than  $n$  contracts over  $x/n$  DM each.

The counterargument is that financial intermediation not only involves a credit contract (= loan contract) between the bank as a lender and the borrower, but also many credit contracts between the bank as a borrower and the depositors (= deposit contracts). Thus financial intermediation may raise the number of contracts. Despite of this the total administration cost can be lowered by financial intermediation if the cost of a deposit contract is sufficiently low. This is true if the depositors feel no need to screen and monitor banks carefully. Such a situation exists when the default risk of banks is negligible. Thus a prudent lending policy is necessary.

The same is true if some private deposit insurance exists. A private deposit insurance can eliminate solvency risk only if most banks follow a prudent lending policy so as to avoid losses exceeding their equity capital. A prudent lending policy is based on thorough collection and evaluation of information and on diversification.

## 2 Collection of Inside Information and Diversification

In a world of uncertainty and asymmetric information a prudent lending policy requires

- thorough screening of loan applicants,
- thorough monitoring of actual borrowers and appropriate reactions in the case of adverse changes,
- diversification of credit risks.

Diversification of credit risks is not sufficient to preclude the lender's default. In addition, loan requests with substantial default risk have to be rejected. Then a "small" premium for default risk, paid to the bank, suffices to assure the bank's solvency (Diamond [1984]).

Screening and monitoring could be based only on publicly available information. But most creditors search for additional information for the following reasons :

- often publicly available information has become outdated,
- often managers in the borrowing firm have inside information which is considered important for the borrower's credit rating and which, at least in part, can be gained by visiting the borrower's firm. Such "indoor-analysis" includes inspections of the firm to evaluate the efficiency of its operations, discussions with managers about the current status of the firm and about the firm's plans. Such discussions also reveal the managers' quality which is considered essential for the firm's credit rating. Hence "indoor-analysis" can generate valuable inside information. Today, German banks appear to place more weight on "indoor-analysis" than in former days as business conditions tend to change faster, and, therefore, information on the past as contained in balance sheets and income statements has

lost importance. Information on the future as revealed by future business strategies, for example, is considered essential.

One might assume that collecting inside information on a borrower is redundant when credit rating agencies such as Moody's have published their ratings. These ratings are based also on inside information. While a bank would presumably reduce its inside information collecting activities in the face of a published rating, it is unlikely that it would refrain completely from these activities. One reason is that the rating may have become obsolete. Another reason is that the bank may evaluate information differently. Finally the bank's reaction on new information can only be tailored to the borrower's situation if this is known to the bank.

### 3. Some Implications for Insider Trade

#### 3.1 The case of Favorable Inside Information

The preceding discussion allows to derive some implications for insider trading of banks. In the case of favorable inside information the bank would like to purchase undervalued outstanding securities issued by a firm. But the argument for granting banks privileges in financial intermediation does not apply here. Banks are granted privileges to protect their solvency under unfavorable conditions. These conditions do not prevail when favorable inside information on a borrower emerges. Hence there is no reason for allowing banks to purchase securities on favorable inside information.

### 3.2 The case of Unfavorable Inside Information

The situation is different in the case of unfavorable inside information. Unfavorable inside information may emerge in three different time phases:

- before the publication of the securities prospect,
- after the publication of the prospect, during the placement of the securities in the primary securities market,
- after the publication of the prospect and after the placement in the primary securities market.

In the first phase, unfavorable information has to be enclosed in the securities prospect. Otherwise the issuers of the prospect are liable for misinformation.

The situation is more complicated after the publication of the prospect. In Germany, banks are the placing agents, they may also be underwriters of a new issue. In order to smooth the placing of new securities, the placing agents buy and sell securities. If the placing is successful, then all securities are sold within a few weeks.

Suppose that some unfavorable information arrives. Then the placing agent and the underwriter are strongly interested in selling the new securities as fast as possible. There are two ways of doing this. First, clients are advised to buy these securities; second, the securities are sold anonymously at a securities exchange. If clients are advised, then the bank is obliged to inform the client about all important aspects of the security (Hopt [1975, 431f]). Otherwise it violates its fiduciary responsibilities as an advisor. This responsibility does not exist in anonymous sales at a securities exchange. Hence the question arises whether banks should be allowed to sell securities anonymously at a securities exchange in the second and/or the third phase.

A creditor's solvency is endangered by unfavorable developments of borrowers in the second and in the third phase. One might argue that this danger is greater in the second phase before the new securities are placed in the market. Although this is true, no underwriter will underwrite a whole issue. Thus the underwriters can and will limit their exposure. Therefore there is no need to regulate banks' rights in insider trading differently in the second and in the third phase.

### III Substitutes for Trading Debt Securities

When the effects of a restriction on someone's activities are discussed, the first question to be answered is: Are there substitutes for the excluded activities and what are their effects?

#### 1 The Case of Favorable Inside Information

In the case of favorable inside news on the borrower, the bank would like to purchase the undervalued debt securities. If this is prohibited, the bank may try to extend credit to the borrower. The borrower, however, is usually insider. Therefore he will accept new loans only on the basis of the new favorable information. Thus the bank will not be able to profit from inside information by extending credit. Valuable substitutes for insider trading are not known in the case of favorable inside information.

#### 2 The Case of Unfavorable Inside Information

In the case of unfavorable inside information, the bank might want to sell the debt securities. Depending on the debt loan contract and the banking law, there exist various substitutes for selling the debt securities.

A first substitute is a loan call, provided the loan contract assigns the bank the right to call. As long as the borrower is able to pay back his obligations on a call, the bank escapes the increased default risk. In Germany "Die allgemeinen Geschäftsbedingungen der Kreditinstitute, no. 17" which are generally agreed

upon in the loan contract, permit the bank to call the loan in the case of a substantial deterioration of loan quality or to ask for additional credit collaterals. This right can be exercised by a bank without informing other creditors. The probability of a successful call is higher if other creditors do not call themselves because it is easier for the borrower to repay only one loan. Thus the success of a call depends on whether the call can be kept secret.

Schedule D.4 of the Annex to Directive 79/279/EEC might apply here. If the call might significantly endanger the borrower's ability to pay his obligations, then Schedule D.4a) would require disclosure and thus reduce the attractiveness of a call. Similarly, §44a of the German Securities Exchange Law requires disclosure of all facts which can impair the capacity of a borrower to pay his obligations. It is not clear whether a loan call belongs to these facts. In any case, a loan call reduces the borrower's financing opportunity set.

A second substitute for selling the loan stock is a request for additional credit collaterals. Again, the success depends on the other creditors' behavior. If they do not know about the request and, hence, do not react, then the borrower may be able and ready to satisfy the request. If, however, many creditors file a similar request, then the borrower's existing assets may be insufficient so that such requests become useless. In such a situation the creditors may ask for additional equity capital which is used either for acquiring additional assets or for retiring some loans.

A third substitute is a conversion of the loan into equity. This is possible only if the credit contract gives the creditors a conversion right or if the equity owners agree. Although conversion changes the nature of the creditor's claim profoundly, it may be attractive for the creditor if a high probability of default coincides with a high probability of high profits, i.e. if the borrower's investments are highly risky. Conversion of loans into equity implies that the converted claims are lower in states of default, but higher in states with high investment returns.



A fourth substitute is the creditor's pressure on the borrower to change his investment program. The creditor may, for example, urge the borrower to reduce the risk of his investment program even if this reduces the overall value of the borrowing firm. Although commercial law usually assigns the management rights to the equity owners and their agents and not to the creditors, the latter can exercise some pressure on low quality-borrowers by threatening to cut back their credit.

There may exist other, less important substitutes. The next section analyzes the economics of the proposed restriction on debt securities trading, taking into consideration the substitutes.

#### IV Economic Analysis

##### 1 Optimal Allocation of Capital

An important criterion of economic efficiency is the allocation of capital. Capital should be directed towards the uses with the highest social returns. As investments are subject to uncertainty, an investment with initially good prospects may turn out as non-profitable. Then it may be optimal to cut back the investment and reallocate the capital. But the opposite can be true as well. If, for example, the investment is of a highly specific nature, then disinvestment may imply a total failure. In such a situation it may be best to invest additional capital and adjust the investment to the current situation.

Now consider a bank which receives some unfavorable inside information. If it can sell the debt securities, then it can refrain from any substitutes which would change the borrower's investment program. Thus the sale of debt securities removes pressure on the reallocation of capital.

Similarly, owners and managers often are interested in postponing the declaration of insolvency since insolvency endangers the benefits which they earn from the firm (Franke [1984]). Then the bank's role should be to enforce the declaration of insolvency by cutting back loans. Again, if the banks can sell their claims

at overvalued prices, given unfavorable inside news, then this enforcement mechanism is weakened. These arguments support restrictions on sales of debt securities.

There exist counterarguments, however. First, creditors are not entitled to exert strong influence on the borrower's business policy as they are affected by changes in business policy only to a small extent as compared to equity owners. If this argument is accepted, then creditors will demand the right to protect their position in case of adverse developments by some other means. One is the sale of debt securities.

The second counterargument states that in the case of unfavorable information the creditors are not pressing for a business policy which maximizes the value of the firm, but the value of their loans. Usually this implies a conservative investment policy which reduces default risk. Hence creditors are not necessarily seeking to improve the allocation of capital. Thus it may be better if creditors do not interfere with business policy and sell their debt securities.

## 2 Avoiding "Unfair" Redistributions of Wealth

Trading on inside information redistributes wealth to insiders. These redistributions are considered "unfair", besides possibly adverse economic effects. Therefore many countries have restricted insider trading. The question to be answered here is whether the prohibition of banks to sell their debt securities avoids redistributions of wealth. It will be shown that this is not true.

Suppose that the creditors of a tradable loan receive unfavorable information. If they sell their overvalued debt securities, then wealth is redistributed from the purchasers to the creditors. This is regarded as undesirable. Now consider substitutes for trading.

The first substitute is a call of the loan. Suppose that the creditor with inside information calls the loan. Then the firm may have various devices to finance the repayment of the loan. One choice is cutting back the investment program. If this program is highly risky, then cutting back the investment program may reduce the investment risk and thus may be in the interest of the other creditors. But this is not sufficient to protect the other credi-

tors against unfair redistributions of wealth. Consider the following example. The debt securities trade at a price (97) below par (100) because the firm's rating has already deteriorated in the past. If the inside information were public, the price would be 90<sup>4)</sup>. Hence by selling the debt securities the creditor earns an "unfair" price differential of 7. If, instead, the creditor calls the loan, then he gets the par value of 100, i.e., he earns 10 in addition<sup>5)</sup>. Who is expropriated by the call?

In order to repay the par value, the firm has to disinvest or raise new funds. If disinvestment reduces the market value of the firm's future cash flows precisely by 100, then the disinvestment neither raises nor lowers the firm's market value. The call expropriates the firm's owners and other current creditors such that they lose 10. All of this is borne by the other current creditors if in each future state of nature the cash flows from the disinvestment would have been used for additional debt servicing exclusively. Otherwise part of the 10 has to be borne by the firm's owners.

If the firm repays the par value by newly raised funds, then the new money suppliers bear part of the expropriation cost if they do not have the inside information and therefore pay too much for the newly issued claims.

This example shows that a prohibition on creditors to sell their debt securities on inside information does not preclude "unfair" redistributions of wealth. They may even grow.

One possible objection to this argument is that the creditor would have earned 10 by calling even if the inside information were made public. The success of a call does not depend, in fact, on the existence of inside information, but on whether the called loan is repaid by the borrower. This is more likely if the call is secret. If one creditor calls the loan and the other creditors know this, they will do the same in order to escape the negative

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4) Although the loan is callable at 100, the market value is below 100 as the firm is not able to repay all debt securities without going bankrupt.

5) The reader may ask why the creditor does not call the loan even without inside information in order to reap a benefit of  $100 - 97 = 3$ . For relatively small benefits, the creditor, in general, will not call the loan since he may do other business with the borrower which he would lose after a call. In addition, calling a loan for relatively small benefits impairs the creditor's reputation as a reliable lender.

effects of the first call. The situation is similar to that of a run. If one creditor calls his deposit, then the others follow and trigger a run which finally ends in bankruptcy. Thus secrecy of the call is essential.

As long as loans can be called secretly, they may lead to higher wealth redistributions than loan stock sales. Thus it does not make sense to preclude "unfair" wealth redistributions through sale of debt securities without precluding secret loan calls.

A similar story is true of requests for additional credit collaterals. After the arrival of unfavorable inside information the creditor can secure his claim by obtaining additional collateral. Collaterals can be of two different types. The first type includes loan specific guarantees from third parties and does not affect the rights of the other creditors. The second type includes claims on specific assets of the borrowing firm and thus implies a redistribution of claims among the firm's creditors. Most collaterals are of the second type since third party-guarantees are costly to obtain.

With the second type of collaterals, redistribution of wealth is restricted to the firm's creditors. Hence, in our example, full protection of claims by collaterals would enrich the secured creditor by 10 at the expense of the other creditors.

Again, the success of this substitute does not only depend on inside information on the firm's prospects, but on keeping the request for additional collaterals secret. If all creditors knew about the request, then they also would file the same request. But then the request could not be fulfilled. If "unfair" redistributions of wealth are to be avoided, then requests for additional collaterals, based on inside information, have to be prohibited or to be disclosed.

The third substitute for selling debt securities is a conversion of debt into equity. It is attractive after the arrival of inside information if the value of the debt securities will be impaired more heavily by the inside information than the value of the ownership claims and if the conversion terms deteriorate over

time. The first condition is unlikely to hold, however. Usually unfavorable inside information depresses the value of ownership claims more than that of debt claims. Thus conversion does not appear to be important in this situation.

Summarizing this section, it has been shown that loan calls and requests for additional collateral being substitutes for selling debt securities, can redistribute wealth to a larger extent than selling debt securities does if these substitutes can be used secretly. Thus the coincidence of inside information and of secrecy of these substitutes raises as many problems as the coincidence of inside information and of secrecy of selling debt securities.

Therefore regulation is inconsistent if creditors cannot sell debt securities on inside information, but use substitutes. As the legislator grants banks the privilege to act on inside information in the lending business, banks should be allowed to sell debt securities on unfavorable inside information. This helps the bank to protect its solvency. But this argument does not imply that banks are allowed to purchase debt securities on favorable inside information since such information does not threaten the bank's solvency.

### 3 Speed of Dissemination of Information

The allocation of capital and of risk improve under fairly general conditions with the speed of dissemination of information in the capital market, opportunities for "unfair" wealth redistribution are more limited. Moreover, a higher speed of dissemination reduces the information cost borne by outsiders. With very high speed, it does not pay for outsiders to obtain costly information since they cannot turn this information into profits. Therefore economic analysis of insider regulation also deals with the impact of insider trading on the speed of dissemination.

Two questions arise. (1) Does the speed of dissemination of information grow with insider trading, especially with debt securities trading by banks as compared to substitutes?(2) What is the effect of Art.7 of the EC-Directive and of §44a of the German Securities Exchange Law on the speed of dissemination? According to these laws, the borrower has to disclose important inside

information immediately or, if this would prejudice his legitimate interests, inform the competent authorities who may relieve him of the obligation to disclose.

Ad (1): There is unanimous support in the literature that insider trading accelerates price adjustment to new information. Although outsiders cannot infer the contents of information from the price movement, they can infer whether the information is favorable or unfavorable. This is sufficient to reduce wealth redistributions through insider trading. In addition, information costs of outsiders will be reduced. Finally, secretly used substitutes as loan calls or requests for additional collateral would not speed up price adjustments. Therefore the speed of dissemination of information can be increased by permitting the banks to trade on inside information.

Ad 2): Schedules C.5(a) and D.4(a) of the Annex to Directive 79/279/EEC and §44a of the German Securities Exchange Law attempt to raise the speed of dissemination of information directly by forcing the companies themselves to immediately disclose important information. The exception to this requirement is the protection of a firm's legitimate interests. What these interests are, remains to be seen. As long as these interests are not specified, it is difficult to assess the economic implications of this exception<sup>6)</sup>.

In any case, the stronger the disclosure rule is, the higher is the speed of dissemination. Therefore insider trading may become redundant as a mechanism to raise the speed of dissemination of information.

#### 4 Liquidity of the Primary and the Secondary Loan Market

Another criterion for evaluating economic efficiency is the liquidity of the primary and secondary loan market. The more liquid a market is, the better is the allocation of claims. In the secondary market, insider trading has two effects. First, insider trading increases the trade volume, simply because insider orders

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6) Manne [1966a, p.104] notes that the permission of insider trading creates an incentive for the insiders to delay disclosure of information. As long as banks are neither expected nor obliged to disclose information on borrowers, this argument seems to be unimportant, although it is possible that a bank urges its borrower not to disclose information before the bank has secured its interest.

exist. Second, outsiders may be afraid of being exploited by insiders and thus may refrain from trading. This is well known from the "lemons principle" (Akerlof [1970]). A market may break down if information differences between traders become sufficiently large. Thus a downward bias of debt securities prices as hypothesized by Demsetz [1986] may not be sufficient to induce outsiders to buy the securities (see also Chiang/Venkatesch [1988]). Confidence is eroded by insider trading.

Whether the first or the second effect dominates, depends on the size of potential information differences. If these differences are large, then exploitation opportunities are large so that outsiders trade rarely. Hence liquidity is expected to be small. This effect is reinforced in a market maker-based capital market by the fact that market makers raise the bid-ask spread with the share of insider trading (Glosten [1989]). The increase in the bid-ask spread serves to insure them against exploitation by insiders. In addition, bid-ask spreads are negatively related to liquidity. A higher bid-ask spread raises transaction costs and thus deters insiders and outsiders.

If potential information differences are small, then insider trading may increase the liquidity of the secondary market as outsiders are less afraid of exploitation. Hence if the rules on disclosure of information, mentioned above, are strictly applied, then insider trading might raise liquidity although the volume of insider trade should be small.

If banks are not allowed to sell debt securities on inside information, then the substitutes "loan call" and "request for additional collateral" might equally impair liquidity of the secondary market. But this effect is likely to be smaller because wealth redistribution is scattered across many security holders while insider trading redistributes wealth only across those who trade the securities.

The prohibition of insider trading in the secondary market affects also the liquidity of the primary market. This effect is ambiguous, too. Prima facie, prohibition of insider trading constrains the bank's future opportunity set in lending. Thus less banks engage in lending so that the primary market's liquidity is reduced. But selling of debt securities without inside information

is easier if the liquidity of the secondary market is improved by prohibition of insider trading. Therefore, it is not clear whether the prohibition of insider trading improves or impairs the liquidity of primary and secondary markets.

### 5 Efficient Compensation Schemes

Sometimes it has been argued that profits from insider trading are an appropriate compensation for insiders, especially for the firm's managers (Manne [1966b], Alchian/Woodward [1987]). Although private profits from managerial trading on favorable inside information motivate the manager to raise the firm's profits, it is hard to see why this motivation requires insider trading. If the manager is officially given warrants which can be exercised after some time has elapsed, then his motivation should be similar. In addition, the manager's compensation should be paid by all claimholders since all claimholders benefit from his performance. With insider trading those claimholders pay who incidentally trade when the manager exploits inside information.

In the case of unfavorable information the manager may want to make the firm's situation even worse because then he profits even more from selling short the firms' securities or buying puts on these securities (Franke [1987], Anabtawi [1989]). Hence insider trading can create perverse incentives for the manager. Therefore profits from insider trading cannot be regarded as an efficient compensation scheme.

Similar arguments apply to banks trading debt securities on inside information. If a bank can sell short debt securities, the bank may do this and then disclose the information so that the price of the debt securities goes down. The disclosure of information can be detrimental to the borrower in various respects. These perverse incentives can be removed by prohibiting short sales of debt securities and trade of derivative assets. If banks are only allowed to sell their debt securities on unfavorable inside information, then perverse incentive effects do not exist. These effects neither exist with selling debt securities nor with using substitutes.



## 6 Surveillance Costs

If insider trading is prohibited and this is to be enforced credibly by some competent authority, then some surveillance system is needed. This creates a surveillance cost (McGee [1988]). The surveillance system proposed in the EC-Directive appears to be expensive since it proposes administrative authorities which have to be given all supervisory and investigatory powers (Art. 8). Schedules C.5(a) and D.4(a) of the Annex to Directive 79/279/EEC state that a firm which does not disclose important inside information, has to inform the authorities who may relieve it of the obligation to disclose. This may require a large administrative body. Moreover, firms may have to spend much money to convince the authorities not to disclose some important information.

§44a of the German Securities Exchange Law assigns the role of the competent authority to the Börsenvorstand, i.e. the board of the securities exchange. Another candidate for the competent authority is the Bundesaufsichtsamt für das Kreditwesen. §44a has been effective since the end of 1986. It appears that, so far, requests for relief from the obligation to disclose are the exception.

It is difficult to see why non-disclosure needs to be authorized. It should suffice that the board of a firm can be impeached and punished for illegitimate non-disclosure. If such a solution imposes too much uncertainty on the board, then it suffices to give the board the option to ask for authorization of non-disclosure. Such a solution would save substantial surveillance costs.

## V Conclusions

The results of the paper can be summarized as follows.

(1) The role of banks as a financial intermediary is to invest deposited money. Deposit claims should be largely risk-free in order to create a stable financial system. The banks pursue this objective by thorough screening of their loan applicants, monitoring and diversification. Thorough screening is done by collecting and evaluating inside information it. Similarly, postcontractual monitoring relies to a significant extent on inside information. Up

to now, banks not only have been permitted to act on inside information, but have been expected to do this as this enhances the stability of the financial system.

(2) The last decade has witnessed a substantial increase in securitized loans which are traded on securities exchanges. The frontiers between commercial and investment banking vanish in countries with separation banking. Thus the issue is raised whether banks should be permitted to trade debt securities on inside information in order to protect their solvency.

(3) The European Directive on Insider Trading prohibits banks from trading debt securities on inside information.

(4) Economic analysis shows the following social benefits and costs of debt securities sales on unfavorable inside information:

- Selling debt securities because of unfavorable inside information on the borrower is a convenient way for a bank to avoid default problems. Thus pressure for socially desirable reallocations of loan funds may weaken. But banks are not interested in maximizing the borrowing firm's market value, they want to protect their claims. Therefore optimal allocation of capital is not assured by banks interfering with the borrower's investment policy. In addition, banks should not interfere since the owners of the firm are assigned the management rights. Hence optimal allocation of capital does not require to prohibit banks from selling debt securities on unfavorable inside information.
- Substitutes for selling debt securities on unfavorable inside information are loan calls and requests for additional loan collaterals. Both substitutes may create even higher redistributions of wealth among claimholders if the substitutes are used secretly on unfavorable inside information.
- The speed of dissemination of information grows with insider trading, the information costs of outsiders may go down.
- The effects of insider trading on the liquidity of primary and secondary debt securities markets are ambiguous.

-- Compensation of banks and managers, based on insider trading, are inefficient. If banks are only allowed to sell their debt securities on unfavorable inside information, then banks can avoid some losses, but not make extra money.

(5) Even if, in general, the social costs of insider trading are considered to be higher than the social benefits, the opposite appears to be true for banks selling their debt securities on unfavorable information. Banks have to protect their solvency by acting fast on unfavorable inside information. As the sale of debt securities does not appear to create higher social costs than a secret loan call or a secret request for additional collaterals, the banks should be allowed to sell debt securities on unfavorable inside information. This does not imply, however, that banks should be allowed to purchase debt securities on favorable inside information or to trade other securities on inside information.

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