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Abstract: This article analyzes the conflict of interests between shareholders and other stakeholders, including when such conflicts of interests may arise. It is argued that shareholder value cannot be justified simply by referring to any prerogative property rights of the shareholders. Instead, shareholder value coincides with the efficient hypothetical perfect contract. However, due to contractual failures in certain bargain situations, management may be unable to "internalize the firms externalities". This means that in these situations there is a tradeoff between a broad duty of loyalty for management in listed firms and other traditional remedies. The theoretical insights are applied on a case from the Danish Supreme Court (Louis Poulsen A/S) where the interests of the stakeholders were decisive. However, it is shown that the verdict may instead harm the relevant stakeholders illustrating how cautious the legal system should use a doctrine based on the "company's interests". In addition, the notion of a firm's social responsibility is critically evaluated together with the associated pitfalls of accepting this concept.

Keywords: Corporate governance, stakeholder theory, shareholder value, duty of loyalty, company law

Viewing the relationship between the various participants of the firm as a contractual relationship or "nexus of contracts" is not new. In Coase's (1937) pioneering article he takes an explicit contractual approach arguing that the emergence of firms is due to the cost of using the price system. The contractual perspective is now considered as the appropriate theoretical foundation for the economic analysis of corporate law, see e.g. Easterbrook and Fischel (1991) and Fama and Jensen (1983a). However, despite this fact, the studies of situations where the participants fail to reach an agreement have received less attention in the literature. But as this article argues, failing to reaching an agreement has considerable impact on the question of whether management faces a fiduciary duty towards only shareholders or a broader group of stakeholders.

One of the fundamental questions in corporate governance is whether management in listed firms should serve the interests of various stakeholders, other than the shareholders, usually entitled as stakeholder orientation see e.g. Freeman (1984). Alternatively, management may solely concentrate on serving the interests of the owners. Concerning the latter, management may reconcile to the notion of shareholder value facing a narrow affirmative duty of loyalty. A broad duty of loyalty implies that management faces a possible risk of being held liable (hence paying damages) for the firm's activities if they affect the well being of one or more groups of stakeholders. Thus, this question is closely related to the definition of corporate governance, in which there exists two conflicting views.

Shleifer and Vishny (1997) argue "corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment. How do they make sure that managers do not steal the capital they

supply or invest it in bad projects? How do suppliers of finance control managers?" This definition is closely related to the protection of shareholder and creditor rights, whereas other stakeholders e.g. employees, customers and communities are considered as secondary importance.

The Anglo-American system's focus on shareholder value is based on the presumption that shareholders are considered to be the only residual claimants see e.g. Fama and Jensen (1983b). As a natural consequence, management should seek to maximize the market value of current shareholders stock holdings.

This approach has been criticized as being too narrow. Tirole (2001) notices that "Managerial decisions do impact investors, but they also exert externalities on a number of natural stakeholders who have an innate relationship with the firm. There is no denying that such externalities may be substantial; for example, the closure of a plant by a major employer in a depressed area has dramatic consequences for its workers and for the local economy. Why should institution design ignore the natural stakeholders, and favor the investors, who are stakeholders by design by giving them full control rights and by aligning managerial compensation with their interests?" Tirole (2001) defines corporate governance as "the design of institutions that induce or force management to internalize the welfare of stakeholders".

These conflicting views are also reflected in the large difference between the corporate governance systems among the industrialized countries. The magnitude of focus on shareholders interests very significantly. In Northern Europe the law grants employees a certain fraction of the seats of the supervisory board in order to secure the interests of the employees. A higher degree of orientation toward stakeholder theory is also found in Southern Europe where there is a long tradition for

government ownership of large industries and board representatives appointed by the government, thereby representing the political interests of certain stakeholders.

The literature dealing with the seeming conflict between shareholders and other stakeholders is large. The contributions reflect different methodological approaches ranging from financial economics over political science to management theory. For instance Turnbull (1997) asserts the superiority of stakeholder governance based on a cybernetic perspective. Gamble and Kelly (2001) describe the debate in the UK based on considerations from a political science view. Kelly, Kelly and Gamble (1997) provide a throughout description of the ideas behind stakeholder orientation in their collection of contributions under the title “Stakeholder Capitalism”.

This article addresses the issue of management’s duty of loyalty in listed firms using an explicit contractual approach identifying the potential conflicts of interests among different stakeholders. In addition, the article critically analyzes the notion of a firm’s social responsibility. The analysis is based on the methodology of law and economics relying on the notion of the *hypothetical perfect contract*. This does not only presume that parties are assumed to act rationally as well as opportunistically, but also that the problem is to be guided by considerations about efficiency.

It is argued that when a firm’s relationship with it stakeholders can be characterized as pure contractual a duty of loyalty towards only shareholders coincides with economic efficiency i.e. the hypothetical perfect contract. This is because parties may bargain reaching an efficient contract, which provides management with incentives to “internalize the firm’s externalities”. Hence, shareholder value cannot be justified simply by referring to any prerogative rights of the shareholders.

Customers, creditors and employees are all examples of contractual parties although they all give rise to some specific problems of their own.

In the absence of a contractual relationship between the firm and its stakeholders, the article argues that there exist a *tradeoff* between a broad duty of loyalty for management and other remedies. A broad duty of loyalty is efficient when the costs of using the court system are less than the costs associated with government regulation specifically designed to reducing the negative side effects caused by the firm's activities. The theoretical insights are applied on a case from the Danish Supreme Court (Louis Poulsen A/S) where the interests of the stakeholders were decisive. However, it is shown that the verdict may instead harm the relevant stakeholders illustrating how cautious the legal system should use a doctrine based on the "company's interests"

The article ends with a critical evaluation of the popular notion of a firm's social responsibility. It is illustrated how this seeming morally sound notion may give rise to serious adverse selection problems as well as problems concerned with the performance evaluation of firms, the latter caused by the inability to observing and verifying managements actions.

The article is organized as follows. The hypothetical perfect contract is described in section 2. Section 3 deals with the firm's owners followed by section 4 that focuses on the firm's creditors. Section 5 and 6 deals with the firm's customers and employees, respectively. The firm's relationship with its community is analyzed in section 7. Section 8 presents an analysis based on the theoretical insights, of a case from the Danish Supreme Court (Louis Poulsen A/S) where considerations about the

interests of stakeholders were decisive. The article ends an economic analysis of the notion of a firm's social responsibility followed by a conclusion in section 10.

2. The hypothetical perfect contract

The foundation of the economic analysis of law is based on a contractual construction, namely the notion of the *hypothetical perfect contract*. This is a pure hypothetical contract that specifies the actions (obligations) of the parties, in all future contingencies or states of the world. Such a contract reflects the parties' preferences, including their attitudes toward risk bearing and is therefore efficient.

However, due to bounded rationality and transaction costs it is not possible for the parties to facilitate this contract leaving it incomplete. Instead, the law should provide a "second best" solution by specifying what the parties would have contracted upon in the absence of transaction costs and bounded rationality. The perfect contract maximizes the aggregate utility of all stakeholders and thus determines the optimal distribution of rights and duties among them.

A stakeholder is entitled to a certain decision right in a future contingency, if and only if, this particular stakeholder is the one who *is willing to pay the most for this decision right* in a process of bargaining.

The Coase theorem states that if there are no transaction costs or asymmetric information, bargaining will result in a contract that maximizes the aggregate surplus (see Coase (1960)). Obviously, these assumptions are not satisfied in the real world, but this does not imply the irrelevance of the Coase theorem, since the law should be structured as to remove the impediments to private agreements (denoted the normative Coase theorem).

Consider a situation where all stakeholders, including shareholders, have perfect knowledge about all future contingencies, what kind of contract would they agree upon? The answer is the hypothetical perfect contract and any deviations from this contract are therefore harmful since such actions diminish utility. Such a contract would specify that management would refrain from appropriating the investment funds in any given state. Otherwise management would not be able to attract funds in the first place.

The fiduciary duties specified in the law (both codified as well as in case law) therefore enable parties to make *credible commitments*. The legislature might be tempted to incorporate statutory provisions in corporate law (as well as in other areas of law). Unfortunately, statutory provisions rarely coincide with the interests of all stakeholders. In the view of the hypothetical perfect contract, stakeholders should be able to decide for themselves in allocating decision rights see e.g. Hart (1993). Since these attempts very often favor a particular group of stakeholders at the expense on other stakeholders, such regulatory interferences should therefore be limited to occasions where the interests of a stakeholders are seriously at stake. From a normative perspective, legislature should instead seek to reduce obstacles in the bargaining process and the risk of bargaining breakdown (also know as market failures).

The hypothetical perfect contract serves as a “theoretical benchmark” in the analysis of whether there exist an affirmative fiduciary duty for management towards a particular stakeholder in a certain situation. One simply poses the following question. If all stakeholders have perfect knowledge, would they decide a decision right in favor of e.g. the employees at the expense of shareholders i.e. would employees be

willing to pay more for this right than shareholders or would such a rule harm themselves?

3. Shareholders as "quasi-owners"

Shareholders are by definition the owners of the company. In judicial terms, shareholders are considered as principals employing agents to carrying out the management of the firm. Management is endowed with a right to bind the firm in legal transactions. However, as a consequence of the informational asymmetry between owners and management, the latter may opportunistically pursue contracts, which enhance the utility of the management at the expense of the owners. Management may engage in "empire building" or enjoy perks such as, luxurious offices with expensive furniture and rugs.

The principal-agent literature therefore concentrates on formulating optimal (in the sense of second best) contracts so that the interests of the parties coincide. Grossman and Hart (1983) show that in order to align the interests of the parties, the agent's remuneration must be a function of the stochastic outcome. The disadvantage is that it creates an inefficient risk allocation between parties when agents are risk averse (i.e. there is a tradeoff between optimal incentives and efficient risk allocation).

The presence of asymmetric information creates agency costs, which distort the functioning of capital markets. Jensen and Meckling show (1976) in their classical article how an entrepreneur who considers selling a proportion of his firm by issuing outside equity will suffer a utility loss. When the entrepreneur after an IPO consumes non-pecuniary benefits he enjoys the full benefits of these benefits whereas he only bears a lower fraction (equal to his residual equity share) of the costs. Potential

outside equity investors therefore foresee the entrepreneur's behavior and will therefore not pay as much for the outside equity, hence the agency costs are entirely borne by the entrepreneur himself.

Corporate governance is concerned with how these agency costs are mitigated either through internal or external control devices (see e.g. Romano (1996) for a discussion of control devices in corporate law). The most important internal control and monitoring device is the Board of directors (the market for corporate control may be regarded as an external control mechanism). Alchian and Demsetz (1972) are the first to provide a theoretical justification for the necessity of an independent monitoring function. They argue that in team production participants have incentives to hire a manager to monitor the individual participants marginal contribution to the outcome. Thus, in order to provide the monitor with optimal incentives, the monitor needs to be a residual claimant.

Shareholders incur transactions costs when they engage in monitoring activities. For a large strategic shareholder the marginal net benefits by incurring additional monitoring costs may be higher compared to a small investor who only owns a small fraction of the shares in a particular firm. Thus, when investors are rational they hold efficient portfolios holding several securities thereby minimizing the firm specific risk. Figure I shows the relation between portfolio risk (variance) and the number of securities. A rational investor would therefore hold approximately N* securities, since an additional number of shares would not decrease portfolio risk.

[INSERT FIGURE I]

If a shareholder spends an additional amount in monitoring activities, the associated gain will not only benefit her self but also all the other shareholders leaving her with only a tiny fraction of the benefits generated by these monitoring activities. This creates an incentive to *free ride,* which is known by management. The problem of free riding is enhanced when the ownership structure is dispersed, as in the US and the UK, which was first recognized by Bearle and Means (1932). For the vast majority of small private investors, buying e.g. one share in Microsoft does not provide the private investor with an owners feeling of having something identifiably in possession that must be protected by laws of property rights. The main thing that concerns the investor is the expected future dividend streams, or put more concretely, the stock price.

This relates to an interesting question namely, how do shareholders property rights differ from more traditional legal concepts of property rights? As will be argued, shareholders may be characterized as “quasi owners”, not very different from other sources of production input. Referring to shareholders property rights as reasons to justify management’s duty of loyalty towards only shareholders may therefore be less economically convincing.

It has been argued that stakeholder orientation undermines private property rights of the shareholders see e.g. Sternberg (1997). Traditional legal theory of property rights regards property as a bundle of rights in which the owner is free to exercise his rights and also exclude others from interfering with the owner’s exercise of his rights. This means that an owner may destroy his property without any liability or use the court system to block anyone who violates his property rights. In contrast, shareholders are not allowed to exercise their rights as more traditional owners. No shareholder is

allowed to use a listed company's assets for his own purpose or to restrict management's access to corporate resources. Shareholders do not own a specific asset in the firm - only proportional fraction of the company's assets and the liability is limited to the equity invested. If a shareholder intents to use the company's resources for own purpose, the shareholder will be held liable and will be sued for damages for any losses. Hence, shareholders may be regarded as "quasi owners". Instead of referring to any prerogative rights of shareholders, the notion of shareholder value may be reconciled using the hypothetical perfect contract.

Consider the following somehow simplified situation. A farmer owns a piece of land but has no cash for investment purpose. Another person called the capitalist has sufficient cash for investment, but no land. There is an investment opportunity that yields a positive net present value if the project is realized. To initiate the project there is a need for an upfront cash investment (both parties are risk neutral).

If the project is initiated, there is a potential risk that the farmer will demand a larger fraction of the projects profit i.e. there exists a *hold up problem*. Recall that in the hypothetical perfect contract parties know all future contingencies. This means that both parties know whether the farmer will hold up or not. The hold-up threat materializes in the example since the capitalist's investment is to be considered as sunk i.e. irreversible and the farmer can appropriate all the value of the project.

When the capitalist knows that the farmer will hold-up, clearly the capitalist will not invest in the project in the first place and no gains will be realized creating a welfare loss. Thus, a statement from the farmer where he promises not to hold-up is simply not credible. The only way in which the farmer may attract the funds from the capitalist is to make him the residual claimant i.e. selling the project to the capitalists.

As a consequence, the capitalist will receive all control and decision rights otherwise no cash will be invested and no social value will be realized. The notion of shareholder value therefore coincides with the hypothetical perfect contract, recognizing that investments are regarded as sunk.

4. Creditors

The contract between the firm and its creditors differs from the "equity contract". Contrary to holders of equity, the firm's creditors receive a fixed amount of cash (interests and the principal) but creditors do not receive any decision rights if not contracted upon. Normally, equity is subordinated debt and debt is very often secured by collateral.

Suppliers of various production input may also be considered as creditors if payment is due after delivery, although the analysis of this group of stakeholders is not very different from debt creditors (tort creditors are analyzed in the next section).

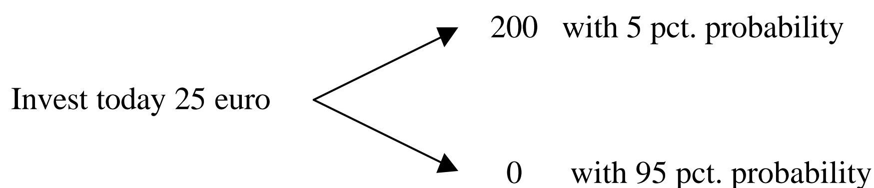
An investor intending to supply capital to firms may choose between buying equity or debt e.g. corporate bonds. The choice depends on several factors including investor's preferences towards risk. Even though corporate law in certain countries, especially in Scandinavian countries, contains provisions that address the protection of creditor rights c.f. fixed minimum capital requirements, the protection of creditors is usually codified in insolvency law.

One should notice, that the discussion of a fiduciary duty towards creditors is only relevant when a firm is in financial trouble and both bondholders and shareholders want the firm to recover. There is an inherent conflict of interests in such a situation

since shareholders are tempted to engage in very risky projects at the expense of the creditors.

To illustrate, consider the following example. A firm has a market value of 50 euro and bonds outstanding of 100 euro. The debt matures in a year from now and the firm has 25 euro in cash. Assume without loss of generality that the discount factor is zero and that management is only loyal towards shareholders.

Management has identified a very risky project (high variance) with the following payoff structure:



The relevant questions are whether management should invest in this project in the first place and if initiated, how does such an investment affect the wealth of shareholders and bondholders? Even though the project has a negative expected value of –15 euro ((0*0,95+200*0,05) - 25) and as a consequence reduces the firm's market value, management may be tempted to invest in the project. From the perspective of the shareholders the firm will probably go bankrupt anyway so shareholders are essentially betting with the bondholders money (equity may be regarded as a call option). Shareholders have a chance of receiving 200 euro if the firm is lucky or alternatively nothing (expected value of 10). This illustrates the general point that shareholders in levered firms gain when the risk increases.

Returning to the notion of the hypothetical perfect contract, we may ask whether creditors would be willing to pay for a right, requiring management not to engage in the mentioned project. The answer is yes, meaning that it is beneficial for society if creditors have an opportunity to sue the management for damages in such a situation. Thus, the decision to invest prior to insolvency may even be voided. Holding management legally responsible using the court system in these situations eliminates the use of a broad and vague extended duty of loyalty.

5. Customers

The firm's customers represent the primary source of income and the relationship between the firm and its customers is entirely a contractual relationship, which is often repeated. An understanding of the customers needs is essential for the survival of a firm and it also provides valuable information in the product market competition among firms. Even if management acts opportunistically, it rarely finds itself in a situation where, it is economically beneficial to neglect the interests of customers (provided that the firm does not have a monopoly).

The key question is whether management has a duty to neglect the interests of the shareholders at the expense of customers in certain situations. As argued, the answer should be no, although this does not imply that management does not care about the interests of the customers. The reason is that the legal system forces management to internalize the "externalities" given that management faces a fiduciary duty towards the shareholders.

To illustrate, consider the case of product liability where firms may sell products, which may suffer from hidden defects. Such accidents are unavoidable and cause

harm on the buyer or his property. Customers may therefore be regarded as tort creditors in this situation. Management's decision to take precautions thereby reducing the risk of accidents are naturally influenced by considerations about product liability i.e. how much should the firm spend on precautions in order to minimize the costs of expected harm (see Shavell (1987) for a comprehensive economic analysis of accident law).

Requiring a firm to protect the interests of customers by taking the highest level of precaution is not efficient from an economic perspective since it eliminates the customer's incentives to take precautionary measures. It can be shown that the optimal situation is where the sum of precaution costs and the expected costs of harm are minimized. Using a doctrine of strict liability (which is the case in most jurisdictions), the firm may allocate the expected costs of harm over its entire range of products charging a higher price than if no accident occurs. There is no need to incorporate an extended duty of loyalty for management. Firms would find it difficult to attract equity in the first place if such a duty existed.

Thus, no customers would be willing to pay for a right requiring management to take the highest level of precaution since no individual customer is able to asses the risk of an accident correctly and hence the value of such a right.

Even though the court system may not function perfectly due to transaction and enforcement costs the law can very often provide a framework, which is beneficial for customers given that management serves the interests of the shareholders. The firm's transactions with its customers are often repeated over time. Creating a reputation for selling high quality goods, or developing a trademark enables the market to function by providing management with proper incentives. If a firm, despite of having invested

in a trademark, afterward decides to reduce quality control, this may destroy the value of the brand or trademark. Hence, management finds it in its best interests to maintain a relatively high level of quality control. As illustrated, there is no need for any extended duty of loyalty since the legal system provides management with the right incentives serving the interests of the shareholders.

5. Employees

The firm's employees are important stakeholders since employees naturally have something "at stake" in the firm they work in such as job protection and safety at work. The employees' influence on management's decisions varies considerably among the major industrialized countries. It ranges from the German system where the employees occupy half of the seats in Board of directors in large firms (c.f. the so-called Aufsichsrat) to the Anglo-American system where employees (besides directors) are absent in the Board of Directors.

The relationship between the firm and its employees can be described as a contractual relationship. There are several ways in which the interests of the employees can be handled. The most direct way in which the interests of employees can be protected seems at first glance to be through employee ownership. Several European countries seek to provide employees with incentives to acquire an equity stake in the firm they work in by having special tax benefits for holders of employee shares.

Returning to the contractual approach, there are two major problems in relation to the employees, namely concerning potential *hold up problems* and the employees "*working conditions*" in the broad sense. Concerning the latter, it is a fact that firms spend an enormous amount of money in order to improve the working conditions

hereby hoping to boost productivity. Such initiatives are not motivated by laws but through pure cost benefit calculations by management. A related question is whether government interference requiring firms to implement certain minimum standards of working conditions coincide with economic efficiency. In other words, do such standards imposed by law enhance the welfare of employees?

Requiring high standards at the work place increase labor costs and if productivity is not increased with the same amount, the demand for labor will decrease causing an increase in unemployment. The problem is that the government is not able estimate whether there has been an incremental increase in productivity precisely, but must rely on some inaccurate aggregate statistical measure.

In a non-contractual relationship (seen from an ex ante perspective) e.g. the relation between the firm and potential job applications (or unemployed), problems may arise. To illustrate, consider two job applicants, a man and a woman with different productivity labeled θm and θw respectively, where θw first order stochastically dominates θm i.e. $F(\theta)m > F(\theta)w$. The employer observes the applicants sex but the employer is not able to determine the productivity of each applicant. Assume a labor market with perfect competition so that wages equal (marginal) productivity. Assume that θ is uniformly distributed on the interval (0,1) so that the expected productivity is ½.

Consider a law passed in parliament requiring that firms must not discriminate between workers with different sex so that woman and men must receive equal pay. Even though the law may reflect sound moral considerations it is dubious whether such an initiative will actually benefit the weaker part. This is because woman with high productivity above average will only receive ½, which is lower than their

productivity and value. At the same time, low productivity men will apply since they receive an above wage compared to their qualifications.

As a consequence, high productivity woman will not apply in the first place; hence the distribution changes so expected productivity drops to 1/4. Now applicants with productivity levels above ¼ decide not to apply for the job. This process continues until reaching the extreme case where nobody applies for the job. As this illustration of adverse selection shows, stakeholder orientation implemented by laws may turn out to be harmful for the specific group of stakeholders, which the regulator seeks to help (the problem may be modified if employers are allowed to hire people on probation in relatively short period of time).

Turning to the hold up problem, shareholders are by construction residual claimants, but when employees engage in firm specific investments they may also become residual claimants see e.g. (Blair (1984), Turnbull (1997) and Blair & Roe (1999)). In particular, "human capital" is important in technology intensive firms, where most of the added value comes from innovation, product customization or specialized For instance, this is recognized by the OECD that argues for the importance of stakeholder rights to encourage efficient levels of investment in firm specific human and physical capital see OECD Principles of Corporate Governance p.18.

However, as argued this fact does not per se imply that management must face a broad duty of loyalty towards both shareholders and employees thereby serving multiple principals. A situation with multiple principals creates competition among the principals to get the agent to devote relatively more time and effort to their interests at the expense of the interests of the other principals see Bernheim and Whinston (1986).

When employees invest in firm specific knowledge with no alternative value, there is a potential risk for a hold up situation. Holds up problems are studied extensively in the literature and the usual remedies are long-term contracts and vertical integration (c.f. e.g. Williamson (1975) and Hart (1995)).

A key question is whether the parties can bargain reaching an efficient contract so that employees have incentives to invest in "human capital" which is necessary for future economic growth. The perfect hypothetical contract would state that employees will invest in human capital and management (on behalf of the shareholders) will refrain from exercising the hold up threat.

The main obstacle for implementing the perfect hypothetical contract is that in reality investment in human capital is not verifiable and hence cannot be contracted upon. This also means that for instance a law, which prohibits hold up behavior against employees, is useless. Therefore, the only way to ensure proper incentives for human capital is to make employees co-owners as shareholders (stock options is another possibility). Recognizing this implies that the notion of a broad duty of loyalty for management is simply misleading due to problems of verifiability and the fact that no servant can serve the interests of several masters. Instead, employees with firm specific investment should be co-owners protected by a narrow duty of loyalty for management towards the firm's owners.

7. The community

The community is a rather vague description of a group of stakeholders, but in this framework it is defined as the firm's neighborhood or surroundings, which have not been considered previously in this article. Contrary to the other described

stakeholders, there does not exist any explicit contractual relationship between the firm and its community (or its inhabitants). As a consequence, the analysis needs to address how the absence of contractual relationships influences management's duty of loyalty. In particular, it is relevant to analyze the obstacles for a bargaining solution, in which the parties could achieve a "first best contract".

There is no denying that management's actions may inflict the welfare of the community by imposing externalities or side effects on its neighbors. This is the situation e.g. when a firm emits smoke without installing filters that reduce the pollution of the air (such an externality is denoted a public bad). The traditional remedies concerning the latter have been injunction or damages. According to the Coase theorem, in the absence of any transaction costs, parties will bargain reaching the efficient contract. In the example with the polluting firm that emits smoke, the firm could pay the community to compensate for the pollution or alternatively, the community could pay the firm an amount in order to refrain from polluting, depending on which party who is entitled to the property rights, respectively the right to pollute or to breathe clean air.

Economic theory states that, if the costs of an externality are less than the benefits from the externality generating activity, polluting is the Pareto optimal outcome. However, when parties have private information i.e. the firm is not able to observe how much inconvenience the individual neighbor suffers from polluted air, bargaining may fail (c.f. for instance Salanie (2000)). To illustrate, a healthy person does not suffer as much from breathing polluted air as a person having asthma. As a consequence, the usual remedies for externalities, quotas and taxes may not work perfectly.

To elaborate, consider a firm that produces a specific good where the price is given exogenously (perfect competition) denoted *P*. The firm emits smoke and its private marginal costs equal *MC(p)* whereas the social costs from pollution are obviously larger and equal *MC(s)*. Figure II illustrates the optimal level of production. The firm should pollute until social marginal costs equal marginal revenue i.e. where the curve labeled *MC(s)* equals P resulting in a production of *Qs* units. Since the firm does not incorporate these additional social costs of pollution there will be excess production equal to *Qp*. Figure II now illustrates the problem with the informational asymmetry between the firm and the community. In a bargaining situation, the community has incentives to overstate the disutility or loss resulting from the pollution in order to extract as much surplus from the production. The community may e.g. announce that *MC(a)* are the "real social costs" from pollution, where $MC(a)^{3} MC(s)$ claiming a compensation of *(A-a)*.

[INSERT FIGURE II]

The problem solves it self if management knows the true marginal social costs *MC(s)* in which it would not pay more than (B-b) euro. But since this is not the case bargaining may fail. Thus, when the number of inhabitants in the community increases, the community as a whole will announce a higher *MC(a)*. This is because there is asymmetric information among the community's inhabitants. It is an optimal strategy for the individual person to overstate her disutility from the emission of smoke since she knows that the other affected persons will at least claim their true

individual disutility and this fact knows everybody in the community, hence this will result in an increase in the claimed aggregate equal to e.g. MC'(a).

Besides of the problem associated with externalities, management's decisions may cause sudden chocks to its community. For instance, management may without notice decide to close an unprofitable plant in a remote community without other industries, leaving all workers without jobs. This did occur on June 2002 in the Danish city of Frederiksværk. The management in the only lasting Danish steelwork (Stålvalseværket i Frederiksværk) decided to close the plant and fire all the employees. Management declared that due to high energy taxes imposed by the government it was impossible to run a profitable steelwork in Denmark. The steelwork was located in a small town (founded in the 1831) and was by far the major source of income for the inhabitants. The mayor of the city instantly declared that the government had a moral right to help the community out of its severe crisis. The government refused to compensate the city, since it was afraid that other areas in Denmark with similar serious severe problems would do the same. Thus, from the perspective of the government, which had no chance of getting a true picture of the total effects, there was a real risk of paying overcompensation.

Returning to the hypothetical perfect contract, such a contract would in the pollution example specify that the firm be allowed to pollute up to Qs units. Since as argued bargaining may fail, it is relevant to consider other remedies, which could replicate the hypothetical contract.

A duty that specifies that management is responsible towards the community would clearly not work since management does not know the true disutility from pollution.

Instead the firm would produce to little, namely *Qa*, which is less than the optimal quantity *Q*s; hence no investor would be willing to buy shares in the firm.

In the situation where management is responsible towards shareholders, management would not pay more than C euro since any higher amount would result in a deficit.

This results in a production of *Qp*, which exceeds the optimal level *Q*s but this ensures that investors are willing to invest in the firm. As shown, both situations create either under or over production. This reflects the point, that in non-contractual relations, there is no guarantee that parties will reach an efficient agreement through bargaining. Therefore there might be room for government intervention carried out through regulation in this situation. The law may prescribe under what circumstances a firm is required to install filters seeking objectively to determine the "true" social costs. This means that there exist a *tradeoff* between a broad duty of loyalty and regulation where the latter is most efficient if regulation is relatively less costly to stipulate and enforce than using the court system.

8. The Case of Louis Poulsen A/S

In order to illustrate the theoretical issues and give some insights at the application of the developed theoretical framework, I present an important Danish court case from the Danish Supreme court although the problems appearing in the case are relevant to most legal system (the case is published in the weekly Danish Journal of Court Cases: Ugeskrift for Retsvæsen page 133, 1991 Højesteret). The case is about a company entitled Louis Poulsen A/S that was famous (and still is) for its production of electrical equipments, including the world famous lamps designed by the Danish

designer Poul Henningsen. The firm was listed on the Copenhagen Stock Exchange until 1998 where it was de-listed.

Before the case went to trial, a spectacular scenery took place (with a lot of attention form the media) in the mid nineties, in which two hostile blocks of shareholders both sought control with the company. When listed, the firm had its shares divided into two distinct classes of shares, in which the A shares were given 10 times as many votes as the B shares. The nominal value of the share capital was equal to only 57.6 mill. DKK in total in which the A shares had a nominal value of 7.425 mill. DKK. The B shares were spread out on many small investors whereas the A shares were concentrated in the hands of only a few persons who ultimately had full control with the company (some of the A shareholders were also represented in the supervisory board).

The corporations charter contained an important provision in paragraph 5: *Any A shareholder who intends to sell his shares must first offer his shares to the existing A shareholders at a price that a third party provable would accept. Furthermore, any disposal of the shares is regarded as identical to passing of the property rights to the shares*. The relevant paragraph finally stated that any disposal of shares not in conformity with the charter is unlawful. Later this preemption right was stipulated in a shareholder agreement signed by all the A shareholders. However, a few years after this document was agreed, the company's supervisory board (its majority) became aware that a group of A shareholders had signed an agreement with a third party (a raider named Arne Groes) in which he was given the authority to vote by proxy on the shares. During the case the raider had nearly fifty percent of the shares, which

made the incumbent management anxious and therefore very dedicated to keep maintaining control of the company, in fear of losing their job.

As a consequence, the supervisory board requested the A shareholders who were part of the agreement with the raider to put forward the agreement in detail for the supervisory board, which they refused. Afterwards the supervisory on behalf on the company filed a court suit claiming that the agreement violated both paragraph 5 in the charter as well as the shareholder agreement. They argued that the transfer of the proxy votes to a third party must be regarded as a disposition which is legally identical to the transfer of the shares property rights. As a consequence, the remaining A shareholders not covered by the agreement with the raider should have the right to buy the A shares at fair terms. It was publicly know that the A shareholders had sufficient funding to acquire the shares from banks that were considered "friendly" to this group of shareholders. The defendants repudiated the plaintiff's claim and argued that the company was not legally entitled to sue (locus standi) – only the other A shareholders had this capacity.

The case in court raised an unsolved question (at that time) namely, whether the company by its supervisory board had the right to let a court decide if a group of A shareholders had acted in violation of preemptive rights stipulated in the corporate charter. This question had not yet been determined by the Danish (as well as the other Nordic) legal systems since the Company Act was silent about this matter and because no prior precedence in the form of case law did exist. As a consequence, this provided the judges with substantial freedom in deciding this question, including the interpretation of the Danish company Act's paragraph 54. The paragraph states that the supervisory board and the board of managing directors handle the company's

affairs (selskabets anliggender). The plaintiff argued that the company represented by the supervisory board both has a right as well as a duty to interfere in such a situation, referring to the mentioned passage in paragraph 54. Furthermore, the plaintiff claimed that the dispositions of the defendants had created a harmful and unnecessary turmoil about the company's future. In particularly, for the B shareholders who were anxious to get Louis Poulsen A/S out of the exhausting battle about the ownership of the firm, which drained all management's effort away from the management of the firms operations. This turmoil was also reflected in the stock price of Louis Poulsen A/S, which was extremely volatile prior to the time the dispute went to trial. For this reason, one of the largest B shareholders – the LD foundation (the second largest pension fund in Denmark) criticized at the general meeting in December 1989 that the firm lacked a sound supervisor board.

The judges of the Supreme Court declared that the term "the company's interests" mentioned in the Company Act § 54 was only of poor guidance. Instead, the decision should be taken on a broader basis balancing considerations about the company on the one hand and the "company's stakeholders" on the other hand (my own translation). The court supported the view put forward by some legal scholars that the traditional contractual foundation for company law should be modified implying a broader duty of loyalty towards other stakeholders such as; creditors, employees, consumers and the society as a whole (see e.g. Werlauf (1990) who argues for this view referring to the implementation as well as various EU Company law Directives already planned by the Commission). The court stated, that a broader duty of loyalty is not only confined to the company's management but in addition to the company's shareholders or others, which legally or de facto control the company's decisions.

The president of the Danish Supreme court (Niels Pontoppidan) writes in a commentary to the verdict (c.f. U.1991B.255) that there was widespread agreement among the judges that a broader duty of loyalty should be accepted. The verdict of the Supreme Court is based on two main arguments supporting the plaintiffs. First, the defendants represented approximately one third of the votes in the company and second one cannot rule out that the actions made by the defendants had harmed the company and as a consequence had harmed the stakeholders of the firm, especially the holders of the B shares. Furthermore, the court argued that the turmoil created by the defendants such as not being willing to inform about the agreement with the raider had created unnecessary turmoil, which it is a natural task for the supervisory board to eliminate (own translation).

It is natural to pose the following question: Can the verdict by the Supreme Court be supported by economic theory, in particular the considerations put forward in this article? As will be argued the verdict by the Supreme Court was wrong.

The economic effect of the verdict was that the raider's attempt to acquire Louis Poulsen A/S failed, since the preemptive right was triggered. The court justifies its decision referring to the harm imposed on the other B shareholders although it does not specify the nature and the magnitude of the alleged harm. However, since the court effectively had blocked any future takeover attempt, the B shareholders forego a large premium associated with a tender offer proposed by an acquirer. Evidence from the literature suggests that the returns to targets were 35 percent (see e.g. Schwert (1996) who also finds that that returns to bidders are not significantly different from zero). Instead of protecting the interests of the B shareholders, the court's decision

consequently harms this group that does not realize the benefits from a future tender offer.

As mentioned, the B shares were spread out on many small investors that knew their limited legal power when buying their shares in Louis Poulsen A/S. These shareholders were only concerned with maximizing their expected future cash flows from their holdings. With the courts decision, the B shareholders were deprived the possibility of receiving a large gain from a future tender offer so in essence, the verdict by the court consequently harmed the B shareholders.

In addition, none of the other stakeholders of Louis Poulsen A/S would have been exposed to any significant threat associated with a future tender given the court had not blocked such an attempt. Thus, the company did not suffer from any liquidity problems as well and it seems likely that any raider would continue to let the firm produce the famous lamps – so the interests of the consumers were not at stake at all.

The second argument put forward by the court refers to the fact that the defendants represented one third of the votes. However, it is not completely clear why this mere fact should justify the verdict. Instead, one may analyze the relationship between the "raider friendly" group of A shareholders and the opposite "raider hostile" group relying on the notion of the hypothetical perfect contract.

It seems natural to assume that the "raider hostile" group derives private benefits from control (e.g. as members of the supervisory board), which exceed the benefits of the "raider friendly" group (otherwise the latter would not have made an agreement transferring their votes to the raider in the first place). Recall that the hypothetical perfect contract asserts that parties know all future contingencies. We may therefore ask the following question given the above assumption: Does the verdict coincide the

with bargaining outcome had the parties known that a raider would be willing to take control of the firm after the shareholders agreed to the preemptive right?

In order to answer this question we may construct a simple model using the standard bargaining solution see Nash (1950): Assume for simplicity that Louis Poulsen A/S will generate a constant dividend of 100 DKK per share each year forever and that the costs of equity equals 10 percent so that the value of all future expected cash flows is 1.000 DKK. Without loss of generality assume that there only two A shareholders having only one share in the firm: One shareholder who is "raider friendly" named Olsen and another who is hostile towards any raider named Seidenfaden (the name corresponds to one of the A shareholders – an eccentric painter living in Italy. A few years after the trial she succeed in blocking the sale of Louis Poulsen A/S to a Dutch firm entitled Otra).

Let Seidenfarden's private benefits of control equal 200 (present value) whereas Olsen's private benefits are only 50 (present value). Both are risk neutral and know that a raider may exploit Louis Poulsens A/S assets in place more efficiently than in the current situation. The raider is willing to pay 1.500 for each share. Given this information we may ask whether the two shareholders would reach an agreement or not assuming equal bargaining power (noticing that the distribution of the pie does not affect the overall efficiency of any agreement). If they don't reach a deal both shareholders are left with a payoff vector of (1.200, 1.050) for Seidenfarden and Olsen, respectively (equal to the default outcome or disagreement point (d_s, d_o)). Let x equal 1 if they reach an agreement and zero otherwise.

Based on this information, we may write Seidenfarden's and Olsen's utility functions as:

$U_s(x) = 1.200 + (1.500\text{-}1.200)x + t = 1.200 + 300x + T$

$U(x) = 1.050 + (1.500\text{-}1.050)x – t = 1.050 + 450x - T$

Since the money transfer, *T* between the shareholders does not influence the joint value *V** this can be stated as: *2.250 + 750x*, which equals *3.000* if *x = 1*. Recognizing that the shareholders negotiate over the surplus $V^* - d_s – d_o = 3.000 – 1.200 –1.050 = 750$. Given equal bargaining weights $\pi_s = \pi_o = \pi$, Sidenfarden obtains:

$U_s^* = d_s + \boldsymbol{p}_s(V^* - d_s – d_o) = 1.200 + ½(750 – 1200 – 1050) = 450$

$U_o^* = d_o + \boldsymbol{p}_o(V^* - d_s – d_o) = 1050 + ½(750 – 1200 – 1050) = 300$

We observe that value is created when they enter a deal (x=1) and the associated money transfer T is determined as: $U_s^* = 1.200 + 300 + T = 450$ so that $T = 1050$. (we get the same result by looking at Olsens payoff). One can show that even if the raider is only willing to offer 1.200 a joint surplus of 150 is created that yields an equilibrium payoff of 100 for Seidenfarden and 50 for Olsen, respectively.

If both parties had complete information of all future contingencies, specifically that a raider would propose an offer to the shareholders in the near future (paying at least 1125 per share corresponding to a premium of only 12.5 percent) both shareholders would be better off *not* signing the preemptive agreement since this only would create unnecessary obstacles for a successful acquisition of Louis Poulsen A/S. Therefore, the bargaining outcome in which both shareholders tender their shares to a raider coincides with the hypothetical bargaining contract so the verdict of the Danish Supreme Court may instead had harm the relevant stakeholders. The normative implication is that the legal system should be cautious to apply a doctrine such as "the

company's interests" entailing a broader duty of loyalty. Only when parties are unable to reaching an agreement – there may be room for legal intervention.

9. Should a firm have a social responsibility?

The concept of a firm's social responsibility is closely related to the stakeholder theory i.e. whether management should subordinate profit maximization to other goals. According to the wisdom of intermediate textbooks in economics and corporate finance, the firm is a profit maximizing entity requiring management to maximize the market value of shareholders wealth.

Management can satisfy a corporation's social responsibility either by donations to charitable organizations or by influencing its business decisions in a way that directly serves the interests or certain stakeholders. Whether corporate altruism is beneficial in the economic sense, depends on whether a company's intention to support a certain charitable purpose coincides with the interests of the shareholders. If the proportion of shareholders who does not share the organizations charitable purpose is high, management should refrain from such an action in the first place. Instead the company should distribute its proceeds to the individual shareholders who afterwards have the possibility to donate the proceeds to the organization they prefer the most.

As commonly recognized, large donations by corporations are not only motivated by pure altruism, but sometimes also by commercial purposes in order to get publicity and earn goodwill among stakeholders. If the obtained goodwill is substantial, the action should be categorized as a marketing action and hence should be evaluated accordingly to any other marketing approach initiated by management. Management's business decisions may be motivated in order to satisfy the interests of

certain groups of stakeholders or even the society. However, certain business decisions are governed by management's own personal opinions about what is right and wrong, often justified by referring to the company's social responsibilities toward a vague defined group of stakeholders.

As the famous case of *Shlensky v. Wringly Field* illustrates, the court may be reluctant to set aside business decisions by management. A group of shareholders sued the company and its director William Wringly claiming that he had neglected his fiduciary duties since he had not installed light on a baseball stadium. The plaintiffs argued that a light system on the stadium would increase profits since baseball matches could then be played in the evening. Mr. Wringly argued that baseball should not be played in the evening since it would make it more difficult for fathers to bring along their sons to the matches. The court argued that when a business decision was taken without an element of fraud, illegality, or conflict of interests, and if there was no showing of damage to the corporation, then such questions of policy and management are within the limits of the director's discretion as a matter of business judgment.

The reasoning of the court raises several problems, in particular whether the company indeed had suffered a loss due to the opinion of the Mr. Wringly. The problem is associated with the court's decision of granting expectation damages in which the plaintiff is to be restored as if the harm did not occur in the first place. One may well argue that the firm suffered a loss of profit in this case although it may be difficult to assess for certain.

The fundamental problem concerns the relative magnitude of fathers who, as a consequence of the matches scheduled to the evenings, would not attend the matches.

From a utilitarian perspective the court should not set aside Mr. Wringly's decision if the loss suffered from not being able to attend the matches during the evenings exceeds the foregone profit (measured in terms of utility) of the shareholders. Since the court is unable to verify or even measure the loss of the fathers and their sons' utility, the utilitarian approach is less appropriate. From a normative perspective, courts should therefore be less reluctant setting aside such decisions by managers.

Corporations may announce that they intend to maximize stakeholder wealth, focusing not solely on pursuing monetary profits but also on protecting the interests of certain stakeholders, seem at first glance as valid entities given that shareholders preferences are affected. For instance, consider a company that announces that it will not deal with sub-suppliers, which use child labor. It seems reasonable to assume that some shareholders are against child labor. Let $U(I)$ denote the utility of a shareholder, which obviously depends on the Income, I (in the form of dividends). Let $V(I)$ denote the utility of a child employed by a sub-contractor. The utility of the shareholder may take the following form; $U(I, V(I)) = \alpha V(I) + (1- \alpha)I$, where α is a parameter between zero and one that measures the magnitude in which the shareholders utility depends on the utility of the child. Assume for simplicity, that buying the same goods from other suppliers not using child labor costs more for the company and that this "premium"; P equals the increase in the utility of the shareholder.

This may seem as an economically sound policy. However, there are several problems associated with the underlying logic of such a construction, namely the *problem of verifiability.* First, it is almost impossible for the company to verify that a particular sub-supplier does not hire child labour without incurring substantial monitoring costs. Second, it is not possible to verify how much utility, which is

generated by management's decision not to engage with a sub-supplier using child labour. As a consequence, it is impossible to evaluate the performance of the management. Management may simply claim, that a bad financial result is due to high premiums paid to sub-suppliers who claim that they do not hire child labour.

The problem is also embedded in the performance evaluation of green funds or "ethical" investment funds. Even more traditional performance evaluation, taking into account the risk and return structure, is not a straightforward task. The basic idea behind these entities is that they all have a policy requiring them to invest in companies that satisfy certain minimum standards of good behaviour. Despite the honourable intention of these entities, there is an underlying adverse selection problem associated with such an entity. This is because investors are unable to verify the components of the outcome separately (in the example, the premium paid and the increase in utility of the child). They only receive a noisy signal of the sum of $(V(I) + P)$. As a consequence, one would expect, that green funds of low quality i.e. the ones which do not invest accordingly to their standards, would drive out the honest green funds since they will invest in companies that do not incur the premium P. This will eventually result in a market breakdown as described by Akerlof (1970) in his lemons model.

The policy implication resulting from the mentioned considerations is, that if shareholders have strong preferences against the use of child labour, the shareholders should distribute their dividends to e.g. charitable organizations seeking to improving the living conditions of children in the third world. Therefore, management should care about generating monetary profits, which could maximize the potential proceeds available for charitable donations. There is no evidence that companies can improve

the living conditions of children at fewer costs than specialized charitable organizations. In essence, the notion of a firm's social responsibility can be misguiding – instead one should recognize that individuals must have a social responsibility.

10. Conclusion

This article deals with a fundamental question in the corporate governance, namely whether management in listed firms should serve the interests of stakeholders other than the firm's shareholders. If this is the case we may speak of a broad duty of loyalty for management - a topic of crucial importance in corporate law. The article identifies when such conflicts of interests among different stakeholders may arise.

The analytical approach is based on the hypothetical perfect contract. This contractual construction serves as the theoretical benchmark in the analysis of situations where the firm's stakeholders are not able to reach a bargaining solution.

It is argued that referring to any prerogative property rights of shareholders does not support the notion of shareholder value. Instead, it coincides with economic efficiency since that is what all stakeholders would have agreed upon if the parties had perfect information and there were no transaction costs. Moreover, when management faces a duty of loyalty towards only shareholders it provides management with incentives to "internalize the firms externalities", which are protected by other forms of regulation. This is because management may reach a bargaining solution with the relevant stakeholders as illustrated by the case of Louis Poulsen A/S from the Danish Supreme Court. In the case the interests of the stakeholders were decisive for the Courts verdict. However, it is shown in the article

that the verdict may instead harm the relevant stakeholders illustrating how cautious the legal system should use a doctrine based on the "company's interests".

Furthermore, in non-contractual situations there may exist obstacles for a bargaining outcome since it is impossible for management to observe and verify the disutility of the firm's activities on e.g. its community. Therefore bargaining may fail and the hypothetical perfect contract will no longer be replicated. In this situation there is a tradeoff between a broad duty of loyalty for management and other remedies specifically designed to reducing the negative side effects caused by the firm's activities.

The articles ends by analyzing the potential pitfalls associated with uncritically accepting the notion of having listed firms facing a social responsibility. It is argued that this notion may give rise to serious adverse selection problems as well as problems concerned with the performance evaluation of firms, the latter caused by the inability of observing and verifying managements actions.

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FIGURES

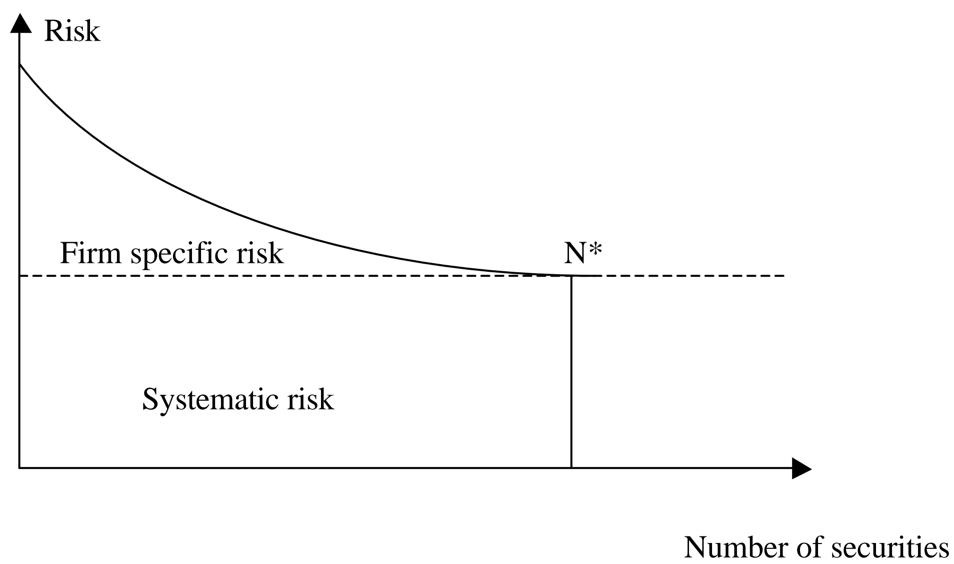

Figure I. Portfolio risk and number of securities

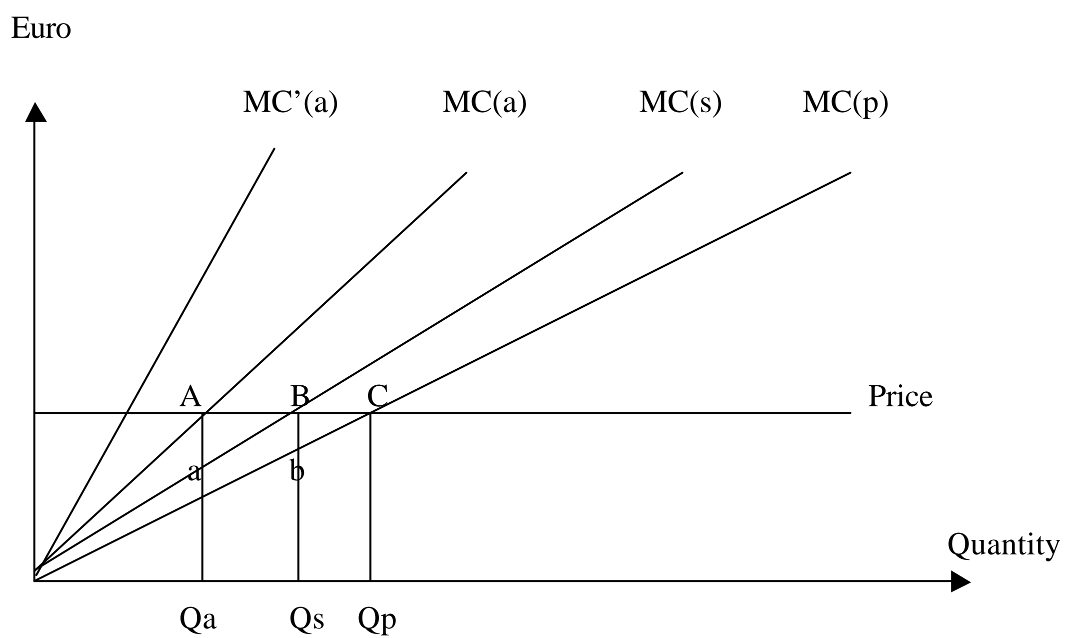

Figure II Graphing externalities of pollution under asymmetric information