LIABILITY FOR NUCLEAR ACCIDENTS IN BELGIUM
FROM AN INTEREST GROUP PERSPECTIVE

MICHAEL FAURE

Rijksuniversiteit te Leiden, Faculteit der Rechtsgeleerdheid, Postbus 9520, 2300 RA Leiden, The Netherlands

AND

ROGER VAN DEN BERGH

Universitaire Instelling Antwerpen, Universiteitsplein 1, B-2610 Wilrijk, Belgium

INTRODUCTION

Liability for nuclear accidents in Belgium is governed by a strict liability rule and subjected to compulsory liability insurance. In addition the compensation due to the victim is limited.

The regulation of the nuclear risk has traditionally been explained, both by the legislator and by legal doctrine, on victim protection grounds. Many lawyers favour the evolution towards an expanding strict liability and compulsory insurance, arguing that these devices suit the need of effective victim protection.

Taking a closer look at the regulation, it, however, becomes clear that its contents cannot entirely be explained on victim protection grounds. The legal mechanisms used are not effective means of victim protection. Indeed, as will be explained below, compared with the previous law, strict liability combined with a limit to compensation does not improve the situation of the victim substantially. Moreover, the advantages of strict liability and compulsory insurance have to be weighed against the disadvantages of the regulation for the victim (such as the channeling of liability and the short periods of limitation) before definitive conclusions with respect to the victim’s position can be drawn.

A better insight in statutory arrangements can often be achieved by analyzing them from an interest group perspective. This is true both for market and non-market regulations, such as liability rules. The purpose of this paper is to use the Belgian regulatory framework for nuclear accidents to show that the interest group theory of regulation can also help to provide a better understanding of regulations concerning liability rules and insurance. Hitherto this theory has mostly been applied to explain the passage of legislation in fields of production and distribution.

In this paper we use interest group theories of regulation to find an explanation for some odd legal rules which do not serve the goal of victim protection, pronounced by the legislator. We start from the assumption of rational behaviour by utility-maximizing politicians. Useful insights will be obtained by examining the regulation as a form of rent-

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seeking by interest groups. In this respect special attention will be paid to the legal mechanisms to effectuate the rent-seeking, such as the limitation of liability.

The paper is structured as follows. In the first part the legal situation will briefly be summarized. The second part will contain the explanation of the relevant regulation, advanced by the legislator and by legal doctrine, which is primarily a victim protection argument. The third part will show that the victim protection argument advanced by the legislator does not provide an entirely convincing explanation for the existing regulation. In the fourth part the regulation of the liability for nuclear accidents in Belgium will be analyzed from an interest group perspective. First, the institutional framework of the market for regulation will be examined by describing the interest groups active in the regulatory process. Then the statutory arrangement under discussion will be reexamined taking into account utility maximizing behaviour by politicians and rent-seeking by the different interest groups involved. The last part of the paper contains the conclusions.

1. THE LEGAL FRAMEWORK: THE ACT OF JULY 22, 1985

The liability for the licensee of a nuclear plant has been introduced in Belgian law through the implementation of several international treaties. Most of these conventions were initiated by the European Nuclear Energy Agency (ENEA) of the OECD. The Belgian Act of July 18, 1966 implemented the Convention of Paris of July 29, 1960 and the Protocol of Paris of January 28, 1964. This Act of 1966 introduced a liability for the licensee of a nuclear reactor and a duty to insure. In addition, the amount of liability was limited to 500 million BEF. However, Article 6.3 of the Act gave the King the power to raise the amount of liability by Royal Decree. This was done by Royal Decree on May 13, 1980 whereby the amount was raised to 1 billion BEF. The change was motivated by reference to inflation.

A bill was introduced in the Belgian Senate on November 8, 1983 to adapt Belgian law to a new treaty, the Convention of Brussels of January 31, 1963 and an additional protocol to this treaty and to two protocols signed in Paris on November 16, 1982. These protocols and the Convention of Brussels were ratified by the Act of July 3, 1985. The bill led to the Act of July 22, 1985. This is the statute which now governs the liability and insurance for nuclear accidents in Belgium. Some provisions of the Act are of particular interest.

Article 5 of the Act holds the licensee of a nuclear plant liable for all the damage caused by a nuclear accident. The liability is strict and the licensee is bound to compensate even if the accident was caused by an exceptional natural disaster. The strict liability is channeled to the licensee of the nuclear reactor. This means, on the one hand, that the victim can only sue the licensee and, on the other hand, that the licensee of a nuclear plant who is held liable has only a very limited right of redress against liable third parties. During the parliamentary proceedings it was stressed that, as a consequence, a suit by the victim, based on the common-fault rule of tort law against either the licensee or a liable third party is now excluded.

1 The ENEA was replaced on April 20, 1972 by the Nuclear Energy Agency after the admission of Japan as a full OECD Member (see Nuclear third party liability and insurance, Status and Prospects, OECD Publications, 1985).
2 Moniteur Belge, August 23, 1966.
7 Parliamentary Documents of the Belgian Senate, 1983–84, 593/1, 6 and 593/3, pp. 32–33.
The liability of the licensee of the nuclear plant is limited to 4 billion BEF. If the damage caused by the nuclear accident is higher, the Belgian State will pay compensation up to approximately 9.1 billion francs. If the damage exceeds the latter amount, compensation will be paid by all the member states to the Convention up to 300 million IMF special drawing rights, which amounts to approximately 15.6 billion BEF.\(^6\) Article 7.2 provides that if the damage exceeds the maximum amount of liability, the King will set the criterion for an equitable division of the amounts available. This Royal Decree has not yet been promulgated.

Article 8 of the Act introduces a duty to insure for the licensee up to the amount of 4 billion BEF. The licensee may alternatively provide another kind of guarantee for the payment of the amount of 4 billion BEF. During the parliamentary proceedings a bank-guarantee was advanced as an example.\(^9\) A licence for the operation of the nuclear plant will only be granted if sufficient insurance coverage or another kind of security can be proven. In the event of insurance coverage being withdrawn during the operation of the nuclear reactor, the Minister will immediately revoke the licence (Article 10). Article 27 of the Act provides the victim of a nuclear accident with a direct right of action against the insurance company. Furthermore, Article 12 provides that the State is liable for the nuclear plants that it operates. However, the duty to insure is not imposed on the State.\(^10\)

Finally, another striking feature of the Act of July 22, 1985 is that the legislator has deviated from the traditional 30-years period of limitations for tort actions. Article 23.1 of the Act provides that the action for damages against the licensee has to be introduced in court within 10 years of the nuclear accident; otherwise the right to compensation lapses. According to Article 23.2 the State will be bound to compensate if the 10-year term has expired. However, the State will only guarantee payment for a period of 30 years after the nuclear accident. Moreover, Article 23.3 stipulates that in addition to the latter provisions, a limitation period of 3 years is also applicable. This 3-year term begins to run at the moment the victim has knowledge of the damage and of the identity of the licensee. Article 23 states that these various periods of limitations have to be applied cumulatively.

2. THE VICTIM PROTECTION ARGUMENT

In this part of the paper we address the reasons given by the legislator during the parliamentary proceedings and by legal doctrine for introducing strict liability, compulsory insurance, limitation of compensation, and the short periods of limitation. The introduction of the regulation has mainly been defended on victim protection grounds. This may be considered as a public interest explanation. In this respect it should, however, be clear that public interest and victim protection do not have to coincide completely. Although most lawyers would require full compensation of victims for public interest reasons, a combination of less than complete indemnity and complete insurance could increase social welfare. As will be explained below in further detail, the current Belgian legislation achieves neither of these goals. The right to compensation is statutorily limited and the insurance coverage is restricted accordingly.

With respect to the strict liability rule for nuclear accidents, it was argued in Parliament that strict liability would improve the situation of the victim, since he would no longer have

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\(^6\)Article 7, 17 and 22 of the Act of July 22, 1985. The proportion to which the Member States have to contribute depends on the gross national income of the state involved and on the power of the nuclear installations on its territory.


\(^10\)The argument was that a duty to insure for the State would be superfluous (Parliamentary Documents of the Belgian Senate, 1983–84, 593/1, p. 10).
to prove that the damage was caused by the fault of the licensee. Also in Belgian legal doctrine the Act is supposed to improve the situation of the victim in comparison with the general tort rules.

The insurance and the insurability of third party liability for nuclear accidents were much discussed during the parliamentary proceedings. The purpose of compulsory insurance was described as: "indemnification of third parties in case of an accident with a nuclear plant," which again points to the victim protection argument. The limit to compensation and the short periods of limitations were motivated by the insurability of the nuclear risk. A member of parliament argued that insurance of the licensee of a nuclear plant should not be regulated; the energy industry in Belgium would be financially sound enough to pay the damage with its own means. The Minister, however, claimed not to be convinced of the financial soundness of the nuclear industry. In addition, he argued that in the absence of compulsory liability insurance, the consequence of a bankruptcy of the licensee would be that either the state would have to pay or the victims would receive no compensation.

The limit to compensation for nuclear accidents was the subject of equally intense debate. In the original bill it was proposed to set the limit at 3 billion BEF. Many members of parliament considered this amount too low, and the proposed amendments attempted to introduce unlimited liability for the licensee, combined with a duty to insure up to an amount of 50 billion BEF. To justify this amendment it was argued that the limit to the compensation was contrary to the principle of full indemnification of the victim. In addition it was suggested that the limit of 3 or 4 billion BEF was disproportionate to the expected losses. These could, according to a cited American study, amount to 11–16 billion US $ (600 to 900 billion BEF) for an average nuclear accident. Finally, the proponents of the amendment criticized the fact that the proposed amount of compensation was not based on any objective criterion "but only on the so called possibilities of the insurance market." Other members of parliament sought to raise the limit on the assumption that the nuclear installation itself was insured for 25 billion BEF.

The government tried to justify the limit of 3 billion BEF on three grounds: first, that, in comparison with other countries, the limit was set at a reasonable amount; secondly, that the existing limit of 1 billion BEF was too low anyway (a superfluous argument); and finally, that full insurance coverage against the nuclear risk could never be obtained. In this latter respect, the Belgian nuclear insurance pool Syban was asked to provide information on the premiums actually paid and the limits on insurance coverage. Syban denied that an amount of, for example, 6 billion BEF would also be insurable. One senator refused to accept the argument that the limit had to be set as a function of the insurability of the nuclear risk. The unwillingness of the insurance market to cover a certain risk should, in his opinion, not lead to lower compensation for the victims. During
3.1 The alleged advantages

To assess the situation of the victims a comparison between the current regulation and the legal situation before the introduction of the Act of July 22, 1985 has to be made. The alleged benefits of the legislation relate to an easier access to compensation. In this respect strict liability and compulsory insurance will be analyzed, each in turn, in order to assess whether these mechanisms ameliorate the position of the victims.

Before the Act was introduced the victim could claim full compensation, based on the fault rule. The new Act would improve the situation of the victims if they would obtain a guaranteed right to substantial compensation without the need to prove fault plus the causal link with the damage suffered. In relation to nuclear accidents these matters may be particularly problematic. Strict liability is said to help the victim in obtaining compensation, since he is released from the heavy burden of proving a fault. However, the Belgian legal system, like many others, qualifies every violation of a statutory or regulatory norm as a civil fault. The nuclear industry is subjected to extensive safety regulation. The victim only has to prove the violation of one of these regulations to establish fault. If, in addition, the victim can prove a causal relationship with the loss suffered, he will be able to claim compensation. In most accident cases this burden of proof is not particularly heavy. It is, therefore, at least questionable whether a strict liability rule substantially improves the situation of the victim in comparison with an already existing broadly interpreted civil fault regime. In this respect, it should not be overlooked that under the general fault regime of tort law the victim is entitled to full compensation. Furthermore, the causation problems which arise if a victim claims compensation for a nuclear accident are not solved by introducing a strict liability rule. Strict liability only relieves the victim from the burden of having to prove fault, but he still needs to prove a causal relationship between the accident and the loss he suffered.

The argument used by the legislator, that compulsory liability insurance is necessary to protect the victim against the insolvency of the licensee of a nuclear plant, also requires consideration. There are many areas in the law where the victim faces an insolvency risk and nevertheless is not “protected” by compulsory liability insurance. More specifically, the question arises whether there is really an insolvency problem for the nuclear industry. Especially in the case of the licensee of a nuclear reactor, the insolvency argument seems to be very weak. Indeed, as will be explained below, the value of the nuclear plant itself is insured for a much higher amount than the limit set by the regulation.

It is further contended that the introduction of compulsory insurance creates two important benefits for the victim: it makes insurance coverage available, and it protects victims against the insolvency of the debtor. Of course the insurability of nuclear risks is a serious problem. Without legislative compulsion, insurance coverage might not be forthcoming. Nevertheless, in spite of the colossal and also unpredictable amount of the loss, insurance markets have emerged without legislative compulsion in the field of nuclear property insurance. Moreover, difficulties in insuring major risks can, in general, not be cured by making insurance compulsory. The latter is demonstrated by the Belgian experience, since the limit on compensation was justified by difficulties concerning the availability of insurance. Hence, legislative compulsion is no miraculous remedy for failing insurance markets. Finally, it is anyway questionable whether the victim protection argument can justify the compulsory liability insurance for nuclear accidents. If a nuclear accident occurs the whole community will suffer and the damage will certainly not be limited to a few individuals. Therefore, it does not seem likely that the private insurance industry can provide the necessary degree of “victim compensation.” One could even argue that the purpose of compulsory insurance is to protect the state rather than the victims. Indeed, there is no duty imposed on the state to insure if it operates a nuclear plant. If victim compensation were the goal of the regulation, this would not be superfluous. According to Belgian law, the state is immune from execution of judgments on
the parliamentary debate the government further argued that significantly increasing the limit was not possible, because Belgium was bound by several international conventions. The discussions in the Senate ended with a rising of the limit to 4 billion BEF. The bill was transferred to the House of Representatives. There, also, the government stated that the prescribed amount was the highest insurable. A proposal to raise the limit to 8 billion BEF was rejected on the following ground: "Let us first try out the actual system and see how the insurance market reacts, inter alia with respect to the calculation of premiums." A member of the House of Parliament again pointed to the weakness of the insurability argument to justify the limit. In his opinion the argument that the market could not insure liability to a loss of 4 billion BEF was odd, because the insured value of the nuclear plant itself amounted to 25 billion BEF. The Minister replied that the insurance coverages were not comparable because the property insurance of the nuclear installation itself was not based on a strict liability. From a legal point of view, the latter argument is erroneous. If damage is caused to the nuclear plant itself, the insurer has to pay compensation for all accidents, irrespective of the fault of the licensee.

Finally, the short periods of limitation in the Act of July 22, 1985 also gave rise to discussions in Parliament. In response the government argued that limitations with respect to the time of the exposure to a liability suit and with respect to the amount of compensation are essential for a regime of strict liability. An amendment was introduced to extend the term in which a suit had to be brought to 30 years, but this was rejected by the government which argued that a short term was necessary "in order to make the risk insurable." Indeed, the Minister said that "as a matter of principle" he was against liability unlimited in time. He criticized the objection of one senator that a three years limitation period was much too short since often much medical consultation was necessary before a suit could be brought, on the ground that attention should be paid to the situation of those who should pay compensation. The Minister also argued that the three year term was generally accepted in the insurance industry.

3. VICTIM PROTECTION RECONSIDERED

The second part of this paper demonstrated that the publicly formulated goal of the regulation was the protection of victims. In order to achieve this goal, strict liability and a duty to insure were introduced. An examination of the parliamentary proceedings also showed that the insurability of the nuclear risk was used as an argument to limit the compensation due to victims and to introduce short periods of limitation. This was the price the victim had to pay for the strict liability and the compulsory insurance. In this part we examine whether the regulation was worth that price: does the regulation improve the situation of the victim? First, the alleged advantages of the new legal rules will be considered. Second, a number of obvious disadvantages will be described. Finally, alternative devices to achieve the goal of victim protection which have not been chosen by the legislator will be compared with the current regulation.

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24Parliamentary Documents of the Senate, 1983–84, 593/3, 58–63. Also in the House of Representatives the Minister defended the short terms to bring suit by pointing to the insurability argument (Parliamentary Documents of the House of Representatives, 1984–85, 1207/3, pp. 7–8).
its property. Although the state could hardly deny that it has sufficient funds to meet judgments, the principle of the sovereignty of the state prohibits that judgments can be executed. In addition it should be noted that the state statutorily guarantees the payment of the compensation by the licensee of a nuclear plant in case of the licensee’s insolvency. The purpose of the licensee’s duty to insure seems, therefore, more to avoid the state paying the compensation instead of the licensee than protecting the victim: the victim is already protected against the licensee’s insolvency by the statutory guarantee of the state.

3.2 The obvious disadvantages

The price the victim had to pay for the strict liability and compulsory insurance was high: limitation of compensation, channelling of liability, and short periods of limitation. We will first address the limitation of compensation. Especially in case of nuclear accidents, the limitation of compensation seems a serious impairment of the rights of victims. During the parliamentary proceedings it was stated that the limitation is set at a much lower amount than the expected losses of an average nuclear accident. Indeed, according to an American study, quoted in the parliamentary proceedings, the costs of an average nuclear accident could amount to 600–900 billion BEF. Therefore, the amount of 4 billion BEF to which the liability of the licensee is limited reduces the victims’ right to compensation to less than 1% of the average costs of an accident. Since the 4 billion BEF is not a limitation per victim but of the total accident costs, this arrangement clearly does not provide the victims with a right to substantial compensation.

The insurability argument, as advanced by the legislator to defend the limitation of the compensation, needs further examination. From an economic point of view it is not clear why a certain risk would become uninsurable only because the expected losses are high. Economists mostly consider risks to be uninsurable if moral hazard is high and cannot be cured or if serious adverse selection problems exist; the large amount of damages does not by itself make a risk uninsurable. Before reaching any conclusion in this respect, one should also take into account the possibility of worldwide reinsurance and pooling of risks. Furthermore, the main problem of the insurance is not the magnitude but the unpredictability of nuclear risks. It is well known that estimates of the risk of core meltdown have varied enormously between studies and have changed substantially over time. Therefore the insurability argument as a justification for limiting compensation is exaggerated; the major problem is apparently not the magnitude, but the unpredictability of the risk. The latter cannot be solved merely by limiting the compensation due.

It is also striking that the legislator has taken the willingness of the insurance market into consideration in the examination of the insurability of a given risk. In this respect, it is significant that the insurance market for nuclear accidents is monopolized. Therefore the

unwillingness of the Belgian monopolist insurer of the nuclear risk, Syban, to provide coverage for a higher amount than 4 billion BEF can hardly be considered as conclusive proof of uninsurability. The information given by Syban is unreliable because of the lack of competition on the relevant insurance market. Insurance coverage is available for nuclear accidents for much higher amounts than 4 billion BEF: in foreign insurance markets third party nuclear risks are insured for much higher amounts and the value of the nuclear plant itself is insured by the same insurer (Syban) for more than 40 billion BEF. Moreover, the national pools are linked; this implies that the capacity to insure should be considered on the world market.

Moreover, the regulation involves other deviations from the general tort rules which substantially impair the rights on compensation of the victim, in particular by the channelling of liability. This means that the victim of a nuclear accident can only sue the licensee of the nuclear plant. The victim cannot sue a third party, even if the loss was actually caused by him. In addition, the victim can only base his lawsuit on the Act of July 22, 1985. In consequence the victim cannot sue either the licensee or a third party under the common-fault regime to claim full compensation, even if he can prove that they acted negligently. It is also clear that the short periods of limitation, mentioned above, and the special terms in which the suit has to be brought substantially impair the situation of the victim. These obstacles may mean that many victims will remain uncompensated.

Hence, the disadvantages for the victim of the Act of July 22, 1985 are clear: the short periods of limitation, the channelling of liability, and the limitation of the compensation clearly impair the victim’s right to substantial compensation. The benefits of the legislation (strict liability combined with compulsory insurance) seem, therefore, to be outweighed by the costs (limitation of the compensation and time limits on claims) as far as victims are concerned. The appropriate and ironical conclusion seems to be that if the legislator had really wanted to protect victims, it would have been better for him to have maintained the status quo. In that case the victim would still have had the possibility of suing on the basis of the common-fault regime in order to claim full compensation.

3.3 Better alternatives?

It is striking that the legislator omitted to consider alternative devices, which could have provided better methods of victim protection. Indeed, even if one were to accept the existence of an insolvency problem with respect to nuclear power plants, the question remains whether compulsory liability insurance is an adequate means of resolving this problem. Under the present legal situation the duty to insure is formulated as compulsory third-party liability insurance. The question can be raised whether alternative insurance devices might not be preferable. An obvious alternative might be to make first-party insurance by victims compulsory. Such a system already partially exists in the field of health and medical care in Belgium. The consequences of third-party liability insurance are therefore not primarily related to victim protection, since victims are already protected by the existing health care insurance: all their hospital costs and medical bills are paid by

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33Due to latency problems, diseases might only appear several years after the nuclear accident. Therefore, the short periods of limitation and special time bars might seriously limit the victim’s right on compensation.

34Act of August 9, 1963.
this insurance. The main effect of introducing compulsory third-party liability insurance is to give the health insurer a right of redress against the third-party insurer. Finally, the Act of July 22, 1985 expressly provides a guarantee against the insolvency of the licensee of a nuclear installation by forcing the state to pay the amount due by the licensee in case of insolvency. Hence, the victim will always be compensated through the state-guarantee if the licensee is judgment proof. It is therefore unclear how compulsory insurance can add anything as far as victim protection is concerned.

Second, the establishment of a compensation fund, which can already be found in several areas of Belgium liability law,35 might be a valuable alternative. Unfortunately, such a possibility was never raised during parliamentary discussions. Indeed, a compensation fund, financed by a tax on the nuclear plant operators could mimic the insurance market without the problematic limits of that market.36

Third, it should also be stressed that there was absolutely no need to link the exposure of liability for nuclear accidents to the willingness of a monopolistic insurer to provide cover. If the legislator was really concerned about the insurability of the nuclear risk, the duty to insure could have been limited to a certain amount, leaving unlimited the liability of the licensee of a nuclear plant. No serious reason was given why the reluctance of the insurer should lead to a limitation of the licensee’s liability.37 It is equally unclear how this arrangement serves the expressed goal of victim protection.

Finally, if victim protection were really the concern of the legislator, there would be no need for compulsory liability insurance, alongside compulsory insurance of the nuclear plant itself. The victims’ rights to effective compensation could be guaranteed through the granting of a preference. If the victims’ claims were to have priority, the insured value of the nuclear plant would first be available to pay the compensation due to the victims. Since the nuclear installation itself is insured up to 40 billion BEF this would leave the victims better off than with a right to compensation from a third party liability insurer, covering only 4 billion BEF.

4. AN INTEREST GROUP-PERSPECTIVE

In the previous parts of this paper we have examined the publicly formulated goal of the legislation, being “victim protection,” and reached the conclusion that the protection of victims is not adequately achieved by the current legal rules. The ironical conclusion was that victims were better “protected” before, rather than after, the introduction of the regulation. The next question is, of course, how this can be explained. Positive economic theories of regulation contribute to a better understanding of legal rules, which use ineffective means to achieve their ends.

In this part we analyze the behaviour of politicians as individual wealth maximizers. The role of the parties involved in the regulatory process will be examined from an interest-
group perspective. The description of the nature of the interests involved and the characteristics of the group enables us to draw conclusions with respect to the scope for wealth transfers. Also information problems may help in explaining rent-seeking by interest groups, which impose considerable welfare losses on the general public. We first identify the parties involved in the regulatory process and their interests. Next, the regulatory process will be described, assuming utility maximization by politicians and rent-seeking efforts by interest groups. In this respect legal mechanisms, such as the limitation of liability, will be analyzed as devices to effectuate rent-seeking.

4.1 The interest groups: victims, nuclear industry, insurers

Let us first consider the role of the (potential) victims. The regulation of nuclear accidents originated from a demand for regulation from 'the public.' The nuclear risk was, and still is, a very sensitive issue for public opinion, not only in Belgium. It is well known that most legislatures are confronted with a flow of legislative decisions that originates from the amalgam of pressure groups. Also in the field of the nuclear risks there was a rather vague demand from the public 'to do something about it.' This demand for regulation was not represented by well-defined and active particular interest groups. Potential victims of a nuclear accident could, nevertheless, be seen as members of a 'shadow interest group.'

A shadow interest group can be defined as a group that would have members and come into being if an accident occurred; potential victims of a nuclear accident can thus be seen as members of this latent interest group. If a shadow interest group ceases to be a shadow group and becomes active, it will have all the characteristics of a normal interest group. Knowing that shadow interest groups have the potential to become an effective lobby, rational politicians will, under certain circumstances, respond to these groups in the same way that they will respond to normal interest groups, even though the shadow groups have not organized. Victim groups may pursue benefits either through seeking legislation or through litigating for benefits. It is worth noting that in the Belgian context, victim groups face serious difficulties in obtaining benefits (compensation) through the litigation system. Class action suits are not permitted in Belgian law. Interest groups are, according to the Belgian Supreme Court (Cour de Cassation), not allowed to bring an action before the courts to recover damages. For these reasons, interest groups have incentives to lobby for legislation, which transfers wealth from the industry to the interest group.

Insurance of the nuclear risk is provided by the nuclear pools. Since the risks faced are considered to be very serious, the national insurance companies in every country have decided to pool their resources on a non-competitive basis. At the beginning of each year the insurers determine the amount that they are prepared to commit for every nuclear installation. The total of contributions made by the participating insurers at the beginning

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40Donald Keenan and P. H. Rubin, l.c., p. 22.
41Donald Keenan and P. H. Rubin, l.c., p. 23.
of the year constitutes the capacity of the national pools involved. In all countries the insurance market operates on this noncompetitive basis.

Reinsurance is obtained from similar "pools" or "syndicates" in other countries. Therefore, nuclear insurance in different parts of the world is in fact connected. Belgian companies participated, for example, in the loss which resulted from the accident at Three Mile Island in the U.S.

The Belgian nuclear insurance pool is called Syban. Every licensee of a nuclear plant who wants to obtain coverage for his third party liability must apply for the insurance for the nuclear plant with this monopolistic insurer. Brokers argue that premiums are relatively high due to the monopoly.44

With respect to the nuclear industry, the last party involved in the regulatory process, we can be brief. The three major electricity companies in Belgium (Ebes, Intercom, Unerg) own the nuclear plants. These utilities are financially connected and there is no competition between the oligopolists. Since there is no competition on the insurance market, neither on the supply side, nor on the demand side, the market involved can be characterized as a bilateral monopoly. Therefore the nuclear insurer will not be able to set premiums as high as in a pure monopolistic market.

4.2 The regulatory process

We will now describe the negotiation process, which led to the Act of July 22, 1985 using standard assumptions from the Public Choice literature and the economic theory of regulation. This will clarify the decision process in the political market and contribute to a better understanding of the resulting wealth transfers. First, we address the incentives of the politicians to provide regulation of the liability and insurance for the nuclear risk. Second, we describe how the regulated industries began to realize the unavoidability of the regulation and thus strived to change its scope. Third, qualitative evidence for the influence of the lobby groups is given. Finally, a possible explanation for the success of the interest groups is provided.

Politicians, acting as utility-maximizers, face incentives to produce "public interest" legislation, together with incentives to broker wealth transfers favouring small interest groups. The politicians will actively strive for public interest regulation because such regulation increases political support (votes) in the long run. Simultaneously they may wish to serve established interest groups which can provide substantial brokerage fees in terms of either votes or pecuniary benefits.45 The most effective lobbyers are small groups, which are well organized and can, therefore, because of low transaction costs, realise wealth transfers which are clearly perceptible for each member. In contrast, successful rent-seeking is most difficult to achieve for large groups, which are difficult to organize.

The politicians of the governing (conservative-liberal) political parties were, given the sensitivity of public opinion for the nuclear risk, willing to formulate a regulation which would at least give the impression that, if anything would go wrong, the victims would be compensated. The fact that sensitivity to the nuclear risk was the most important incentive for the politicians of the governing parties to promulgate the regulation was expressly stated by the Minister during the parliamentary proceedings. Indeed, during the discussions in parliament it was indicated that the introduction of strict liability for nuclear accidents had been influenced by political reasons. Members of Parliament asked the

44See the discussions at the Munich Conference, Nuclear Third Party Liability and Insurance, pp. 192-95.
Minister why strict liability had not yet been introduced for other dangerous activities, such as for the licensees of liquefied petroleum gas (LPG) installations or for the petrochemical industry. The Minister answered "that the risks of these activities are indeed as least as high if not higher than the nuclear risk." He continued: "However, these problems are not as sensitive in the public opinion."46

The promulgation of the Act of July 22, 1985 may be understood as a response to the shadow interest group of potential victims. Most relevant to most voters is their own income. Hence, it is in the interest of politicians to avoid events that would lead to a fall in income.47 Rational politicians also have a clear interest in engaging in activities which make it more difficult for victims to perceive income losses. The same is true for regulations which disguise the real nature of the wealth transfer and give victims the false impression that they are better off with the regulation than without it. The regulation of the liability for the nuclear risk gives exactly this impression by introducing strict liability and compulsory insurance.

We now turn to the position of the regulated industries. At first glance the introduction of strict liability and compulsory insurance seems to benefit neither the nuclear industry nor the insurance companies. One would therefore expect the industry majority to oppose vigorously the passage of this type of legislation. However, due to the sensitivity of the issue in the public opinion, legislative intervention seemed unavoidable. The economic theory of regulation suggests that, under these circumstances, the interest groups involved will accept the general principle of regulation but will strive to change its scope.48 The interest groups will realise that regulation may enhance producer wealth, while it simultaneously corrects, or at least reduces, an externality problem. This outcome has been stressed by Maloney and McCormick with respect to environmental quality regulation49 and is also highly useful in understanding the current Belgian regulation of liability for nuclear risk.

One of the consequences of the structure of the insurance market is that transaction costs in the lobbying process are low. The nuclear lobby does not face start-up costs and thus enjoys an important advantage in rent-seeking. The politicians only have to deal with Syban. The insurance industry, as well as the nuclear industry, enjoys important political power and has strong connections with the politicians of the governing parties. In addition, the monopoly gives the insurer a strong bargaining position toward the other party involved: the nuclear industry, which is the insured. Since this side of the market is also monopolized, the market structure is a bilateral monopoly. Characteristic of a bilateral monopoly is that a joint-profit-maximizing strategy can be followed.50 This seems to apply also in the regulatory context. The interests of insurers and the nuclear industry were partly mixed. Both had an interest in a limitation of the compensation. For the nuclear industry it would lower the premiums. The latter would also have an interest in limiting its liability to the insured amount available; this means that the licensee of a nuclear plant would bear no liability apart from the insured amount. It seems also in the interests of both to have short periods of limitation in order to limit the risk-exposure for the insurer and the exposure to liability for the nuclear industry. At first glance it might seem strange that the insurance industry also favoured a reduction of the liability of the licensee, since this also reduces the

tion, and short periods of limitation. These observed complexities are also consistent with a rent-seeking theory of government. Prima facie, it would seem that the regulation does not transfer wealth to the interest groups and serves the interests of the victims. Even some lawyers consider the Act as an adequate means of victim protection. Only after a critical analysis does one understand that the victim is in fact worse off with, than without, the regulation. This explains why this regulation could easily be promulgated under the “victim protection” flag. Politicians of the opposing party (the socialists) criticized the regulation, but most of the criticisms concerned detailed aspects of the regulation. The point was not made that the victims were left worse off with the regulation than without. In this respect one should take into account that especially because the “shadow interest group” had not been organized they could not counter the rent seeking by the “nuclear coalition” of nuclear industry and the insurance company Syban. Also the legislator lacked sufficient information, as the description of the parliamentary discussions has shown. Apparently the legislators trusted the information given by the regulated industries (for example, concerning insurability), and they could not rely on the latent interest group of the victims to process the relevant information.

CONCLUSION

This paper has examined the regulation of liability and insurance for nuclear accidents in Belgium. It shows that the goal stressed by the legislator and by some lawyers for the regulation, being “victim protection,” does not provide a sufficient explanation for it. Indeed, many provisions of the Act of July 22, 1985, do not improve the situation of the victim: limits to compensation, channeling of liability, and short periods of limitation. It can even be argued that in globo the victim, for whom the regulation was said to be made, is worse off with than without the regulation. The benefits of the legislation (easier access to compensation through strict liability and compulsory insurance) seem to be outweighed by its costs (limited compensation level and time limits on claims).

Based on the evidence from the parliamentary proceedings and from the provisions of the Act of July 22, 1985, an attempt was made to explain the regulation from an interest group perspective. The existing statutory rules can be seen as a mechanism desired both by politicians and by the nuclear industry to reassure the public that victims would be compensated if a nuclear accident occurs. The rhetoric of the “shadow interest group” of victims, aiming at achieving what is called “compensation,” generated extra political support of the industry. This monstrous coalition mainly benefited the producers because of the significant, almost prohibitive, information costs, on the side of the public and the legislator. Since the “nuclear coalition” of industry and insurance meets all the requirements of an effective lobbyist, it could achieve important wealth transfers to the detriment of the general public (victims and the State). In this respect legal rules, such as the limits to compensation and short periods of limitation, can be understood as devices of rent-seeking. Although this paper only provides a first attempt to explore the regulation of liability for nuclear accidents in Belgium from an interest group perspective, the latter theory seems, based on the evidence available, to provide a useful explanation of that regulation.
demand for insurance. One possible explanation is that, because of the unpredictability of
the loss, premium calculation in a profit maximizing manner is impossible, whereas
premiums in other classes of insurance are profitable. Brokers have informed us that the
insurer of the nuclear risk prefers to cover property damage instead of third party liability.
One possible reason for this preference might be the fact that administrative costs can be
much higher in third-party nuclear insurance. This seems to be a plausible additional
explanation for the lobbying in favour of a reduced third-party liability by the insurance
industry.

Evidence for the influence of the lobby groups in the regulatory process can be observed
throughout the parliamentary proceedings. When an amendment was introduced to in-
crease the amount of the limited liability, the Minister expressly stated that it was
necessary first to ascertain whether this amount could be insured by Syban. After a
negative response from Syban, the majority parties voted against the proposal. Other
statements also clearly show that the Minister represented the interests of the nuclear
industry—for example, where he declared that liability should be limited in time, in order
not to expose the licensee in an unreasonable way to risk. Only a few members of
Parliament criticized the proposal to introduce a duty to insure. One member argued "that
it was the intention of the senate-committee to become independent of the insurance
market," which suggests that the introduction of compulsory insurance would make the
legislator dependent upon the insurance market.

The qualitative evidence for the success of the interest groups is clear. Indeed, strict
liability is introduced, but this does not really increase their exposure to liability in a
serious way. A duty to insure is introduced, but in addition the amount of liability is
limited. Short periods of limitation are laid down. Also the State had to pay a price for the
regulation, which transfers wealth to the industry. The State has to guarantee the payment
of the amount due by the licensee in case of insolvency of the latter. In addition the
exposure of the licensee (and therefore of the insurer) is limited to 10 years after the
accident; after that period the state also guarantees the payment of the amounts due.
Through this regulation the public is "reassured" that compensation will always be paid
when a nuclear accident occurs. On the other hand, the interests of the nuclear industry are
better protected than before the regulation. This analysis unmaskes devices in the area of
liability law which can redistribute wealth to the benefit of the industry, in the same way as,
for example, environmental regulations limiting entry do.

Hitherto we have stressed as a possible explanation for the success of the interest groups
their high degree of organization, the concentration on the market, and the followed joint
profit-maximizing strategy. These observations conform to the traditional assumptions of
the economic theory of legislation. The most effective interest groups are likely to be
small, single-issue oriented and well-organized. These factors substantially lower the
transaction costs. In addition, in this particular case the politicians seemed to be dependent
upon the regulated. They had to satisfy a need for a "victim protection" regulation, but by
introducing a duty to insure they became dependent upon the insurance industry to provide
the insurance required.

The success of the interest groups is also to a great extent due to the high information
costs on the side of both the public (the potential victims) and the legislator. As has been
explained in the first section of this paper, the regulation of liability for nuclear accidents in
Belgium is very complicated: strict liability, compulsory insurance, limits to compensa-

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56See M. Olson, The Rise and Decline of Nations, 1982, pp. 26–27, 41; R. Posner, "Theories of
D. Tollison, Politicians, Legislation and the Economy: An Inquiry into the Interest-Group Theory of