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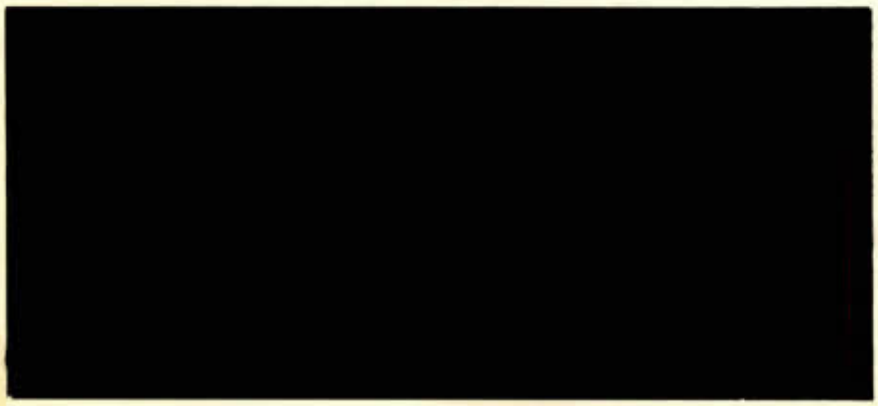

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WORKING PAPER NO. 18

COMPENSATION, TRANSITION COSTS AND REGULATORY CHANGE

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Résumé

Les modifications apportées aux politiques publiques, y compris celles qui touchent à la réglementation, susciteront souvent des coûts de transition substantiels pour le secteur privé; ces effets distributifs préjudiciables donnent lieu fréquemment à des propositions visant à compenser les perdants. Le présent cahier de recherche a pour objet d'évaluer le rôle que les méthodes de compensation pourraient jouer dans la réduction ou la redistribution des coûts de transition, et les conséquences qu'elles pourraient avoir sur le choix des objectifs et des instruments dans l'élaboration de la réglementation.

Le cahier débute par une analyse générale des effets distributifs probables de divers systèmes proposés de réforme de la réglementation, et souligne ensuite le rôle des marchés économiques et politiques dans la répartition et la transmission des pertes attribuables aux modifications apportées aux politiques. Les auteurs identifient et évaluent divers moyens d'assurer la compensation des points de vue de l'efficacité, de l'équité et des considérations politiques. Par exemple, ils

examinent les propositions récentes touchant la déréglementation de l'industrie du camionnage. En exigeant que les transporteurs autorisés, leurs employés, et les autres perdants possibles soient compensés, on peut défendre une politique de compensation sur le plan de l'efficacité en démontrant par une vérification objective que les gains de bien-être attribuables à la réglementation modifiée dépassent les pertes totales qu'elle provoque. Sur le plan de l'éthique, vu que la réforme de la réglementation sera préjudiciable aux transporteurs et à d'autres intéressés (qui se seront souvent fiés de bonne foi à un ensemble de politiques de réglementation qui leur auront été nuisibles) la compensation pourrait, en vue de servir l'intérêt public, constituer un instrument approprié visant à assurer que le sacrifice à faire est partagé entre un plus grand nombre. Dans une perspective de choix politique ou public, la compensation des transporteurs autorisés et des autres perdants pourrait se révéler nécessaire si l'on veut vaincre leur opposition politique au régime de déréglementation. En d'autres mots, en versant une "compensation" aux perdants, une initiative heureuse qui aurait pu être bloquée par des intérêts politiques devient possible.

Les auteurs concluent que les arguments fondés sur l'efficacité et visant à justifier la compensation des perdants de la réforme de la réglementation sont encore trop indéterminés pour apporter un appui solide à tout principe de compensation

particulier. Les transferts destinés à créer des stimulants en vue d'une adaptation efficace aux modifications de la réglementation sont peut-être défendables pour des raisons de bien-être économique et ces programmes "d'aide à l'adaptation" peuvent comprendre des éléments compensatoires. Selon une autre conclusion, les arguments en faveur de la compensation pour des raisons de pragmatisme politique ne sont pas suffisamment convaincants pour justifier la pratique systématique de la "compensation" des perdants à ce chapitre. Dans la plupart des cas, les perdants éventuels pourraient soutenir avec raison que l'affectation de ressources au soutien des groupes de pression cherchant à préserver le régime de réglementation existant leur sera plus profitable que l'acceptation d'une forme pratique de compensation. Enfin, les auteurs se disent d'avis que des théories éthiques établies peuvent être favorables à la compensation de certaines catégories de perdants suite à la réforme de la réglementation, et tentent de déterminer les modes de compensation qui seraient moralement justifiés dans quelques scénarios de réforme concrète.

Summary

Changes in public policies, including regulatory policies, will often generate substantial private transition costs; these adverse distributional impacts from policy changes often give rise to proposals for compensating losers. The purpose of this paper is to evaluate the role that compensation arrangements might play in reducing or redistributing transition costs, and the consequences such arrangements might have both on choice of objectives and choice of instruments in regulatory policy-making.

The paper begins with a general analysis of the probable distributional effects of various proposed schemes of regulatory reform, emphasizing the role of economic and political markets in spreading and shifting the losses from policy changes. Various alternative ways of providing compensation are identified and evaluated in terms of efficiency, equity and political considerations. The paper considers, for example, the recent proposals for deregulation of the trucking industry. By requiring that licensed carriers, their employees, and other potential losers be compensated, a compensation policy can be defended on efficiency grounds as providing objective verification that the welfare gains from the regulatory change exceed the total losses that it generates. From an ethical perspective, because the regulatory

reform will inflict injury on carriers and others (who will often have detrimentally relied in good faith on some set of regulatory policies) in order to serve the public interest, compensation may be appropriate to ensure that the sacrifice is more widely shared. From a political or public choice perspective, compensation of the licensed carriers and other losers may be a necessary prerequisite to overcoming their political opposition to the deregulation scheme. In other words, by "buying off" the losers, a welfare maximizing move that might otherwise have been politically blocked becomes possible.

The paper concludes that the efficiency arguments for compensating the losers from regulatory reform are largely indeterminate and provide no strong support for any specific compensation principle. Transfers aimed at the creation of incentives for efficient adaptation to regulatory changes may be defensible on economic welfare grounds, but existing "adjustment assistance" programmes seem ill-suited to the promotion of allocative goals. The paper also concludes that the arguments for compensation on grounds of political pragmatism are not sufficiently compelling to justify any systematic practice of "buying off" the losers from regulatory reform. In most cases, it will be rational for potential losers to take the position that investing resources in lobbying for the preservation of the existing regulatory scheme will yield bigger pay-offs than accepting some practicable form of compensation. Finally, the paper concludes

that established ethical theories may support compensation for certain classes of losers from regulatory change, and attempts to trace out the compensation practices that would be morally justified in several concrete reform scenarios.

COMPENSATION, TRANSITION COSTS, AND REGULATORY CHANGE

I. Introduction

Conventional economic analysis of the case for proposed changes in the regulatory environment of an industry has relied heavily on comparitive statistics as the principle analytic tool.[1] This entails comparing the social surpluses yielded by the long-run equilibira that would be generated by the different regulatory options available.[2] However, as Dorfman points out, this ignores the costs of implementing these options. Dorfman argues that this neglect is likely to distort regulatory policy-making in various ways. First, the long-run advantages of a preferred regulation, properly discounted, may be too small to justify the costs of implementing it. Second, there are often numerous ways to attain a desired long-run equilibrium, but the transition costs associated with each may vary widely. Failure to focus on these differences may lead to inappropriate choices of policy instrument. Third, transition costs tend to be distributed very unevenly over different segments of the population.[3] The incidence of these costs may influence the choice of instrument or ex post forms of relief. Finally, it is possible for the events that occur during the process of transition from the current situation to the intended equilibrium to reshape the equilibrium.

Dorfman identifies two classes of transition costs: first, transition costs proper, such as the cost of learning

to do business under new circumstances, the increased uncertainty that comes with novelty, and the mistakes that are inevitable during the process; second, capital costs, such as the abandonment of non-transferable but still productive capital and the loss of usefulness of human capital specialized to the conditions created by the pre-existing regulatory regime.[4]

The purpose of this paper is to evaluate the role that compensation arrangements might play in reducing or redistributing transition costs and the consequent impact such arrangements might have both on choice of objectives and choice of instruments in regulatory policy-making.

In addressing these issues, we should also make clear what issues we are not principally concerned to address. First, we are not directly concerned with debating the virtues or vices of constitutional constraints on governmental activity of the kind contained in the Fifth Amendment to the United States Consitution, which provides that private property shall not be taken for public use without just compensation. A provision such as this raises deep philosophic questions concerning the protection of individual rights against the will of democratic majorities. Resolution of these questions requires both a theory of rights and a theory of the relative institutional roles of court and legislature in the liberal democratic state. While some of the considerations that inform debates over these questions are relevant to our inquiry,

we have not assumed the task of explicitly examining the case for a Bill of Rights. It may be noted, however, that a guarantee of compensation for certain types of collectively imposed losses can be regarded as a functional substitute for institutional arrangements of a protective nature, such as constitutionally entrenched rights, or voting rules which require extraordinary majorities or even unanimity. The paper may suggest some of the main lines of analysis for the choice of optimal constitutional mechanisms aimed at deterring rights violations by legislative majorities. Second, while we are concerned with the transition costs associated with regulatory changes generally, we tend to focus on the role that compensation arrangements might play in easing the transition costs associated with recently proposed forms of deregulation. While almost all changes in government policy generate rounds of winners and losers, it is proposals for deregulation to which recent theorizing and experience with respect to compensation of losers from regulatory reform have been principally directed. By adopting a similar focus, we can begin the task of rendering otherwise unmanageably discursive issues more concrete.

Even narrowing the parameters of this study in these ways leaves some very sweeping claims for the virtues of compensation to be evaluated. In a recent article,[5] Gordon Tullock argues, primarily with reference to the example of deregulation of the U.S. airline industry, that efficiency, equity, and political considerations all support

a case for compensating the losers or perceived losers from deregulation. From an efficiency perspective, by requiring that losers be compensated, we ensure that a regulatory change will go forward only if the total of its benefits exceeds the total of its injuries; such a change would increase social welfare. From an ethical perspective, because regulatory reform inflicts injury on some people (who in all good faith may have adjusted their lives or investments to a set of government policies) in order to serve the public interest, compensation may be in order to ensure that the sacrifice is more widely-shared. From a political or public choice perspective, compensation of losers from regulatory reforms may be a necessary prerequisite to overcoming their political opposition to the changes. Thus, by "buying off" the losers, a welfare-maximizing move that might otherwise have been politically blocked becomes possible.

Tullock concludes that "we have a coincidence of efficiency, ethical, and practical arguments, all pointing toward the same action. All of this may seem too good to be true. That St. Francis of Assisi, Boss Tweed, and a board composed of the last three winners of the Nobel prize in economics would all advise the same course of action is difficult to believe. But in this case it is both good and true".[6]

We propose to structure our study of the role of compensation in promoting welfare-maximizing forms of de-

regulation around the three desiderata identified by Tullock: efficiency, equity, and political pragmatism. We proceed first by sketching how economic and political markets distribute losses from regulatory changes in the absence of an explicit compensation principle. We then evaluate the soundness of each of the three virtues claimed by Tullock for a compensation principle.

II. Economic Markets and the Distribution of Losses from State Action

(a) Ex Ante Distribution

In a large variety of settings, parties enter into contractual arrangements that are designed to allocate the risks associated with possible future government actions in ways which are mutually acceptable to them. In periods of rapid changes in the bank rate, we observe mortgage terms being shortened. To forestall the effects of possible future changes in exchange rates, we observe contracts being written which specify payments in given currencies. In some markets, as a hedge against changes in future prices, perhaps induced in part by changes in government policies, we observe futures contracts being written. In some employment settings, we observe tenure and seniority provisions being written into employment relations which shift the risk of employment cutbacks in such sectors, perhaps in part induced by shifts in government policy, from employees to employers or to non-tenured or junior employees. Finally, we observe explicit

insurance markets which can, presumably, in some settings offer insurance against certain classes of risks associated with changes in government policy.

The pervasiveness of private market arrangements designed to anticipate and offset the effects of changes in government policy has led to recent theorizing in the economic literature, especially with respect to government stabilization policy, that most government policy shifts are anticipated and incorporated in a rational way into expectations, as these find expression in savings, investment, production, and consumption decisions in the private sector.[7]

The theory of rational expectations argues that it pays economic agents to anticipate the effect of policy actions. If there is any regularity to policy action and effect, it will be discovered and form part of the information upon which economic plans are based. The implication is that only the unanticipated impulses acting on the system can cause actual output to differ from its permanent path. A "devastating implication" for conventional stabilization policy is that, to the extent that the stabilization policies that a government is likely to invoke in a given set of circumstances can be fairly accurately anticipated, those policies will have no effect on the system.[8] For example, if high rates of inflation are likely to lead to restrictive monetary policy, with high interest rates, economic agents, anticipating this, will secure their investment or consumption

requirements before the change in government policy, perhaps causing an inflationary expansion in demand earlier rather than later, but ensuring that the change has no net impact on the economy.

The robustness of the rational expectations hypothesis is still a matter of substantial controversy. While undoubtedly many potential losses associated with shifts in government policy have been previously discounted by affected parties, it seems equally clear that many have not. The hypothesis would seem to be at its most robust when the government action in question is part of a fairly regular pattern of event and response. However, less recurrent actions (e.g., deregulation of an industry) are unlikely to be as accurately anticipated. Moreover, even given that government actions are fully anticipated, e.g., a restrictive monetary and fiscal policy leading to higher unemployment, it is not at all clear that affected parties will always have reasonably acceptable or fair opportunities to adjust their behaviour to offset the anticipated losses. For example, if employees who anticipate unemployment in these circumstances possess skills which are specialized to a location or industry they may lack (at least in the short-run) the mobility to make offsetting adjustments in their economic activities. Investor and employee expectations concerning regulatory change are central to many of the ethical claims advanced by both proponents and opponents of

compensation; we discuss the moral significance of expectations in a later portion of the paper.

(b) Ex Post Distribution

Where losses are actually generated for parties by State action, parties upon whom the losses initially fall will not necessarily (or even frequently) be the parties upon whom the losses will ultimately fall. Analogizing such losses to the example of the imposition of a new business tax, firms who are initially subject to the tax may pass it back to a greater or lesser extent to their various factors of production or pass it forward to the consumers of their products. These various parties may in turn pass some of their costs on to other parties with whom they have economic relationships. The shifting and incidence of taxes do not lend themselves to easy generalizations, depending in principle on the relative supply and demand elasticities in the various factor and product markets in question.[9]

The important point to be made, for purposes of the present paper, is that it is likely to be extraordinarily difficult in many situations to determine whether a loss ostensibly incurred by a party or parties as a result of State action has been fully or partly discounted ex ante or fully or partly passed on ex post. Without being able to answer these questions, it will be difficult to determine whether ostensible losers have suffered real losses.

III. Political Markets and the Distribution of Losses from State Action

Political markets contain implicit adjustment processes that, over time, may tend to offset gains and losses secured or sustained by different interests on particular issues. If, over time, the distributive impacts of government policies are randomly distributed over different interests, one might argue that a rough evening-out of gains and losses can be assumed, in which case the argument for compensation with respect to losses from a particular policy would be substantially undermined. It may, of course, be unrealistic to assume this degree of randomness in the political process. However, there may be some tendency towards equalization in the gains and losses from government actions as a result of the log-rolling phenomenon in political decision-making. Where there is a non-uniform distribution of intensities of preferences among voters on different policy issues, politicians are likely to find it rational to fashion policies that appeal to impassioned, or highly intense, minorities at the expense of less intense, less passionate majorities. Given a whole succession of issues that must be addressed by government over time with different configurations of high-intensity and low-intensity voter interests surrounding each issue, it is likely that a group of voters who lose on one issue, because they are a low-intensity majority, will win on other issues where they are a highly intense minority. Thus, collective actions that generate private losses may be perceived not as a

succession of unrelated measures with independent distributional impacts, but rather as an ongoing process of political accommodation giving rise to a series of distributional effects which may significantly (i.e., in the long-run) tend to offset each other. Relatively stable patterns of distribution of wealth and income in our society over time lend some prima facie support to this view of the importance of the log-rolling dynamic in our political process.[10] Thus, one might conclude that many private losses generated by collective decisions are already subject to an inherent compensation principle.

The effectiveness of the log-rolling phenomenon as a compensation device is extremely difficult to evaluate. A full netting out of gains and losses requires assessment over a very long time frame and a multitude of different issues, which makes it extremely difficult to make judgments about whether a particular loss suffered by a particular voter or group of voters is a permanent or transitory loss, in terms of the impact of the totality of governmental decisions on the "comprehensive net worth" of a voter over his lifetime.[11] The process of coalition formation through vote trading has a substantial game theoretic aspect which renders its long-run distributional consequences largely indeterminate. In less pluralistic political communities where a majority of voters possess more or less homogeneous preferences over a broad range of public issues, the log-rolling process may break down and majority voting may result in

the exploitation of minority interests. If the members of a dominant faction are free to propose and amend issues on the legislative agenda, a stable majority coalition can form and, in the limiting case, engage in systematic redistribution from the minority.[12] Thus, the randomness of political market outcomes is dependent on the unimpaired functioning of the log-rolling process, with its capacity for producing winning and losing coalitions of roughly equal size and differing composition over a broad range of public issues. On any given vote, e.g., a proposal to remove entry controls in the trucking industry, it will be virtually impossible to ascertain whether or not the losers have been strategically imposed upon by some tyrannous majority. Individuals or groups who suffer losses at the hands of stable winning coalitions are, of course, less likely to derive offsetting benefits from the public choice process and may therefore be preferred candidates for compensation on ethical grounds. In any event, it seems implausible to characterize the potential losers from regulatory reform as the specific targets of some programme of systematic exploitation; in fact, most of the investors and employees identified in the reform scenarios discussed later in the paper may well be net gainers from the political process.

There is at least one type of collectively imposed loss which is systematically less likely to be washed out by log-rolling over the long-run. Losses which are both large in relation to the loser's net worth, and substantially

larger than the losses which usually result from legislative decisions are less likely to be cancelled out by prior or subsequent gains derived from the political market. The economic theory of representative democracy predicts that most losses imposed by the legislative process will be relatively small. The theory's paradigmatic case involves situations where one side to a political conflict over state intervention comprises a highly concentrated interest with large stakes in the conflict, while the other side comprises a very large, widely diffused interest group, the individual members of which have relatively small stakes in the issue at hand. Downs cites as an example of such an issue the case of tariff changes, where typically the industry affected has a substantial and relatively highly concentrated interest in the outcome of the debate, while consumers of the industry's output are very numerous and possess relatively small individual stakes in the issue.[13] In these circumstances, the theory predicts that information costs, transaction costs and free rider problems are likely to prevent, or at least severely inhibit, attempts at collective action by the latter group, and thus leave its interests undervalued in the legislative process. In this standard case of legislative action, the relatively small size and diffuse nature of the consumers' losses increase the likelihood that they will secure offsetting gains from other collective decisions over the long run. For example, voters who, as a widely diffused group of consumers, may be losers on the tariff issue may also, in their capacity as employers or ratepayers, be

winners on some other set of issues where they happen to constitute a highly concentrated and intense minority. Thus the economic theory of legislative politics predicts that, for the vast majority of collectively imposed losses, log-rolling can be relied upon to substantially even-out individual distributive accounts.

While the theory also predicts that legislative majorities are unlikely to impose large losses on concentrated groups, legislative programmes which have apparently accomplished this result are not unknown. Windfall profits taxes for petroleum producers, consumer product safety regulations, and air and truck transport "deregulation" in the United States would all appear to have entailed relatively large losses for small groups of investors and employees. In these unusual cases, log-rolling is more likely to be deficient as an implicit compensation device; it seems less plausible to expect the log-rolling process over time to offset losses of a substantial part of the typical loser's wealth.

Apart from our rather limited point about the likelihood of a long-run evening-out, the inherent complexity of the log-rolling process will make it extremely difficult to determine whether, in particular cases, political markets are already implicitly compensating ostensible losers, thus rendering the case for explicit compensation moot.

IV. Compensation and Political Pragmatism

Despite the fact that St. Francis of Assisi, Boss Tweed and the last three winners of the Nobel prize in economics apparently agree with Gordon Tullock that explicit compensation of losers from regulatory change is a good thing, in fact we observe very little of it happening. Why is this? Are politicians and other policy-makers incorrigibly stupid or is there rationality in their apparent resistance to the concept?

In order not to overstate the point, it is probably important at this juncture to acknowledge the difficulty of distinguishing implicit from explicit compensation arrangements. In our discussion of implicit compensatory tendencies in political markets, we noted that the distributional effects of a series of functionally unrelated collective decisions may tend to offset each other as a result of an ongoing process of political accommodation in which log-rolling plays a central role. Forms of compensation which are more functionally related to the losses to which they are responsive are also to be commonly observed, even though they may fall short of direct lump-sum cash payments. For example, manpower retraining programmes, job placement services, community relocation programmes, regional development grants to firms willing to locate in depressed areas, subsidization of infrastructure development in such areas, may all, depending on the circumstances, be designed to cushion or offset the costs

associated with a change in government policy that affects the economic health of a community or industry (e.g., reduction of the level of tariff protection of a regionally-based industry).[14]

Similarly, the tying of the scale of unemployment insurance benefits to the rate of unemployment in a region, as the Canadian Unemployment Insurance Act[15] provides, can be viewed in the same way, especially if unemployment can be considered as the unavoidable and thus foreseen cost of certain government stabilization policies. Postponed implementation of a policy change may also be conceived of as a form of at least partial compensation to eventual losers from the change, as can "grandfathering" in the form of exemptions from rule changes for individuals and firms that had operated under the old rules. In-kind compensation, such as the provision of state or subsidized housing to people forced to move by e.g., highway construction, may come closer again to explicit compensation. Compensation through tax concessions ("tax expenditures"), such as the granting of deductions to firms in respect of the cost of complying with particular government regulations, may be closer again.[16]

The point to be made here is that the compensatory responses of our political system to losses generated by regulatory changes must be seen as arrayed along a wide continuum from highly implicit forms of "compensation"

not functionally, but perhaps politically, related to losses a group has suffered from a particular action, to forms of compensation which are functionally related to the losses in question but remain to varying degrees implicit, to explicit lump-sum cash payments directly and functionally related to particular kinds of losses.

Tullock appears to be arguing that the political system makes insufficient use of this last form of compensation, especially in a deregulation context. Observably, implicit forms of compensation are widely deployed, at least in other contexts. Why do we not then see explicit forms of compensation more widely used to facilitate welfare maximizing forms of deregulation? We address this question by analyzing the incentive structures of the principal classes of actors in the political market-place who may be affected by a compensation policy.

(a) Losers/Compensation Recipients

Where the prospective losers from a regulatory change face a choice between accepting direct compensation or opposing the change it would often seem rational for them to adopt the second strategy. Take the case of a proposal to reduce the tariff protection of a regionally-based industry, e.g., textiles. Owners of textile factories, employees and their families, local businesses, and social

organizations may be amongst those who will suffer losses if the economic base of the region contracts.

Employees of textile factories, in deciding whether to accept compensation payments for foregone wages in lieu of opposing the change, face an extremely difficult calculus:

1) Does the offered payment fully reflect all wages that will be foregone before alternative employment can be found?

2) Does the offered payment fully reflect foregone non-monetary job satisfaction?

3) Does the offered payment fully reflect non-job economic losses such as losses that may be sustained on the sale of employees' homes or additional costs that may be incurred in acquiring comparable accommodation in some other area?

4) Does the offered payment fully compensate for losses of various amenity values and disruptions to family and social relationships?

5) To the extent that the payments offered assume other action by the government to cushion the costs of change, e.g., phasing out of the industry over time and/or phasing in of support for a new industry in the area, with what confidence can employees treat politicians' commitments on these matters, or how certain can they be of the benefits these commitments will yield even if acted on?

Given the substantial uncertainties that surround all of these, and probably other questions, it may well be rational for employees to take the position that investing resources in lobbying for the maintenance of the status quo may yield bigger pay-offs than accepting a lump-sum payment.

Suppose the government, in order to allay some of the concerns engendered by the above questions, commits itself to compensating for actual losses on an ongoing basis. First, from the perspective of the recipients of this commitment a measure of uncertainty surrounds the question of how much to discount the reliability of promises by politicans of future actions. Even assuming utmost good faith, there will be uncertainty as to how particular losses will be measured in the course of future administration of the policy. Second, and more important perhaps, making compensation payments contingent on proof of actual losses creates severe perverse incentives for the recipients to magnify the losses, e.g., by remaining unemployed for longer than necessary, selling homes at under-value, etc. Efficiency losses, including the monitoring costs of attempting to contain these effects, might well be substantial. Thus, the long-run political viability of a programme for case-by-case compensation of actual losses may appear highly doubtful from the perspective of the potential losers.

(b) Gainers/Compensation Underwriters

Will the persons or interests who are asked to bear the costs of compensation, even assuming they are also the same persons or interests who stand to gain (and let us assume further, gain more) from the proposed regulatory change, find a compensation principle congenial?

Obviously, at one level, the gainers would prefer to obtain their gains for nothing rather than to pay for them. But suppose the gainers understand that unless compensation is forthcoming the regulatory change from which the gains derive will not be forthcoming. Will they support a compensation arrangement which they themselves underwrite? Much may depend on how the compensation is arranged. If the gainers are required to make lump-sum payments to the losers at the outset of the regulatory change, they may now be bearing substantial costs of uncertainty. They face a certain cost in terms of the compensation payments required in return for the prospect of uncertain future benefits. Perhaps both the costs and benefits of the policy change to the gainers could be deferred, for example by the general body of taxpayers underwriting the initial compensation costs, with these costs recouped from future purchasers of the product or service in question in the form of some sort of tax. However, in this case the general body of taxpayers will perceive an immediate and certain impost in return for a commitment of uncertain reliability to recoup the expenditure in the future. Moreover, the process of recoupment may engender misallocative effects of the kind the policy change is designed to remove. These issues are illustrated by proposals for the deregulation of the taxi industry.

In the case of the taxi-cab industry in cities like Toronto, where both entry and pricing restrictions have long been in force and have driven up the tradeable value of taxi

medallions to about $40,000, Professor John Palmer has argued that only price and safety regulation, but not entry regulation, is justified.[17] He has proposed a buy-back scheme for outstanding medallions under which the municipality floats a bond issue to finance the buy-back. Taxi licenses would thereafter be issued in unrestricted number to any person (with a safe cab and competent driver) who is prepared to pay an annual license fee struck at a figure, which along with other license fees, is capable of retiring the bond issue over a lengthy period of amortization. He has also noted that a necessary condition for the efficacy of this scheme is that the municipality must be able to borrow at lower interest rates than medallion owners.

The scheme is ingenious, but several questions are raised by it. First, to the extent that the buy-back arrangement is ultimately financed by future consumers of taxi services through annual license fees which are reflected in higher fares, to what extent are they better off than at present? One would assume that at present new entrants to the industry must finance the purchase of a medallion and reflect those costs in the fares that are charged. Longer standing medallion holders equally incur an opportunity cost associated with retention of a medallion (even if initially received free). Given that these costs, under Palmer's proposal, are not assumed by the municipality but are amortized in annual license fees, it is not clear that the cost structure of the industry will be significantly different than at present.

With a similar wedge driven between the price and marginal cost of taxi services, we might expect to observe similar misallocative effects. Ultimately, of course, these effects will disappear once the bond issue has been retired and annual license fees reduced accordingly. But what value will present consumers (voters) of taxi services place on these long-run benefits? Will the perceived gains be enough to do political battle for, given the widely recognized organizational disabilities of thinly-spread interest groups?

The short-run misallocative effect might of course be avoided by financing the buy-back of medallions out of general tax revenues. However, the additional tax imposts are likely to create misallocative effects of their own in other contexts. These would have to be compared to the misallocations induced by any arrangement in place in the taxi industry. This issue apart, the general body of taxpayers (other than taxi users) derive no benefits from the expenditure of their resources and could scarcely be counted upon to be strong political proponents of the virtues of the scheme, even assuming that it would be rational for them to invest the time and resources entailed in figuring out what their tax dollars were being spent on in this context (which seems unlikely).

(c) Politicians

We assume along with many other commentators (Tullock prominent among them) that politicians are motivated by vote-maximization objectives in choosing policies. In general, this will entail choosing policies that 1) confer benefits on marginal voters while imposing costs on infra-marginal voters, and 2) given information imperfections in the political market-place, confer benefits on marginal voters in highly visible form while disguising the costs from other marginal voters to the extent the latter are cost-bearers. In other words, a strategy of magnifying the gain while disguising the pain is a politically rational approach to policy choice.[18]

The implications of this in the present context would seem to suggest a general political predisposition against explicit compensation arrangements. Explicit compensation for losses associated with a new policy (e.g., deregulation) renders the cost of that policy extremely visible, without necessarily making the benefits of the policy any more visible. Under a compensation principle of the kind we are considering, the losers from the new policy are at best left indifferent to the policy as a result of compensation. At worst, for reasons earlier canvassed, the losers may remain strongly opposed to the policy. This opposition will have to be weighed politically against the support of the beneficiaries of the policy. If the benefits

are both widely dispersed and substantially deferred, it is not clear that the support for the policy will countervail the opposition to it.

Depending on how the compensation is financed, the underwriters of the compensation scheme may represent another source of opposition. The more explicit, and hence more visible the compensation arrangements, the more strenuous the opposition from the underwriters of the compensation is likely to be. In order to contain opposition to the new policy from these sources politicians will face strong incentives to disguise the compensation payments from them, perhaps by deploying implicit rather than explicit forms of compensation.

A more general factor tending in the same direction, at least in a deregulation context, is the costliness to politicians of acknowledging past mistakes. Very explicit forms of compensation to losers from the withdrawal of a prior regulatory programme may be, or be perceived to be, a clear acknowledgment of fallibility with costs, in terms of political credibility and confidence, that extend beyond the parties immediately affected by the change in policy.

All these doubts about the political returns from an explicit compensation principle must be viewed in the broader context of alternative expenditure choices that are available to politicians. If, through a highly visible ex-

penditure policy in some other context, greater political returns can be realized it would be politically rational to prefer this other policy. Given budget constraints and the unavoidability of such choices, it would not be surprising if politicians generally concluded that public expenditure programmes could more profitably be directed to ends other than underwriting compensation schemes for losers from regulatory reform.

(d) Bureaucrats

It is difficult to see why bureaucrats in general would be strong supporters of proposals to terminate regulatory programmes given the reduction in bureaucratic inputs typically involved in programme termination.[19] Only if bureaucrats themselves were included in compensation arrangements might they become indifferent to the change but here, as with other recipients of compensation, they are likely to be left bearing substantial costs of uncertainty (unless the compensation arrangements are made extremely generous to offset these costs).

Bureaucrats, like politicians, will view the compensation issue in the light of all other policy choices open to them. Would an expenditure of a portion of a bureau's budget on compensating losers be as attractive as expenditures on any other possible programme or policy? While the incentive structures of bureaucrats are far from clear, other programmes

or policies would often seem to yield higher returns in terms of power, pay, and prestige, to the extent that these factors are important in a bureaucrat's utility function. Moreover, as with politicians, explicit compensation arrangements directed to the termination of an existing regulatory policy or programme may be perceived by politicians, media and voters as signalling a prior mistake in policy on the part of the bureaucracy in question. Because of the greater permanence of bureaucrats relative to politicians, this perception may be more costly for the former than the latter in terms of career ambitions. Thus, if compensation is to be made at all, one would expect bureaucracies to favour implicit rather than explicit forms of compensation.[20]

All these factors would seem to suggest that bureaucrats would generally tend to be predisposed against compensation proposals for deregulation, but, where these are a political given, to favour compensation arrangements that attach substantial weight to their own interests both in terms of ensuring personal coverage and in terms of high degrees of implicitness.

V. Compensation and Economic Efficiency

Efficiency considerations have been relied on by various commentators both to support and to oppose a compensation principle for losses from state action. In this section of the paper we evaluate those various arguments.

Our conclusion on the probable efficiency effects of compensation is a great deal more qualified than that of Tullock who, it will be recalled, asserted that the efficiency properties of a compensation principle were among its principal attractions. We first turn to his argument.

(a) Compensation and Welfare Economics

Tullock argues that an obligation to pay compensation to losers from regulatory change ensures that proposals will only be implemented if they generate more gains than losses, i.e., generate a net increase in social welfare in the sense that the losers would be indifferent to the change after compensation and the gainers, even after paying compensation to the losers, would still derive a net benefit. This argument draws on a long polemical tradition in the welfare economics literature and should be analysed in that broader context.

First, it is to be noted that the concept of Pareto optimality as interpreted by Tullock really implies a constitutional rule whereby collective decision-making (government) is constrained by the limitation that only welfare-maximizing moves (as defined) are permissible. As Buchanan acknowledges, the Pareto rule "is itself an ethical proposition, a value statement", although he claims "it is one which requires a minimum of premises and one which should command wide assent".[21] This assertion of relative

ethical modesty is not shared by all scholars, many of whom have argued that a requirement of compensation creates a serious bias toward the initial or status quo distribution of welfare amongst individual members of the group.[22] Leaving these ethical issues aside for treatment in the next section of the paper, we focus here on whether a requirement of actual payment of compensation is a guarantee of welfare-maximizing (economically efficient) policies.

The Pareto rule holds that any social change is desirable which results in everyone being better off, or someone being better off and no one being worse off, than before the change. As to the meaning of "better off" and "worse off" in this formulation, a theoretical definition of efficiency in a Pareto sense would hold that "a proposed change is efficient if, after negotiated compensations have been promised by those who stand to gain from the proposal to those who stand to lose by it, the proposal can win unanimous approval. For the 'losers', by expressing their willingness to accept the change as long as they receive a certain amount of compensation, testify that they will, under such conditions, be conscious of no net loss in welfare; while the gainers, by expressing their willingness to pay the same amount of compensation testify that the change will yield benefits to them which are worth more to them (in dollars) than the losers' losses are worth to them (in dollars)".[23]

Any departure from this definition of efficiency (or welfare-maximization) will entail interpersonal welfare comparisons in which the gains to some must be weighed against the costs to others from a proposed change. Given the highly subjective nature of individual preferences (or satisfactions), it has generally been assumed as central to welfare economics that individual welfare positions are incommensurate. The problem is not overcome by adopting a common unit of measurement such as dollars, because one cannot assume that a dollar will generate the same amount of welfare for one person as another.

This has been one of the major critiques of benefit-cost analysis. While it may be true, as a matter of theory, as Kaldor and Hicks argued, that compensation need not actually be paid in order to determine whether it is possible, by a given change, to make some people better off while leaving no one worse off, individual welfare functions cannot in practice be revealed to an outside observer short of the process of unanimous agreement postulated in the definition of efficiency set out above. Given that such a process of collective decision-making is not the one we have chosen and could not be operationalized, even remotely, in any event, we need to ask whether actual compensation payments, albeit not the outcome of unanimous agreement, offer similar assurances of efficient policy changes, or like benefit-cost analysis, impose an arbitrarily chosen social welfare function on all the affected parties.

To the extent that compensation payments are determined by third party adjudication using market data, they will not necessarily reflect the true welfare losses of the parties affected by regulatory changes.[24] For example, if the withdrawal of a tariff or deregulation of an industry (e.g., airlines) results in employee lay-offs, compensation payments that reflect only foregone wages will not fully compensate those employees who derive non-pecuniary satisfactions from their jobs. The withdrawal of a safety regulation that imposes an expected cost of $10 per unit on consumers of a product, assuming risk neutrality, will not, if accompanyed by a compensation payment of $10 per consumer, fully compensate those consumers who are risk-averse and who might be prepared to pay $20 extra per unit to avoid the additional risk. However, the transaction costs of attempting either to negotiate or adjudicate compensation payments on an individual, subjective, basis will often be prohibitive. Nevertheless, any form of non-negotiated compensation payment, as a measure of the welfare loss generated by a regulatory change, may be quite misleading.

On the benefits side, similar problems exist. Assuming that a unanimous agreement cannot be negotiated between gainers and losers, external judgments will have to be made as to what value the gainers attach to the gains and whether these exceed the losses as reflected in the compensation payments to the losers. This will presumably entail "taxing" the gainers to underwrite the compensation payments. However,

individual subjective valuations of the benefits will vary from one gainer to the next, making it impossible to say whether the change is efficient (or welfare maximizing) short of ascertaining individual subjective preferences, which we have assumed is not feasible. A coerced payment of a "tax" does not indicate that gainers view the gains as exceeding the costs.

Short of actual compensation of the losers and actual payment by the gainers, and real agreement among all members of both groups on the desirability of the "mutual trade" (an agreement which, by definition, cannot be inferred simply by virtue of the fact of majoritarian political support for the proposed change), actual compensation payments provide no guarantee that a regulatory change is efficient (welfare-maximizing as defined).

Suppose one were to concede this and to acknowledge that an arbitrarily chosen social welfare function against which to measure the social desirability of regulatory changes is unavoidable. Could it not be argued that bureaucrats and others, undertaking benefit-cost analysis designed to reflect weights derived from this social welfare function, would face reduced incentives to manipulate the calculus so as to give effect to their personal preferences if the costs of their proposals had actually to be incurred by the public sector through compensation payments? Niskanen and others have argued that bureaucrats possess strong personal incen-

tives to expand the size of their bureau's budget, and that these incentives for budgetary expansion generate a systematic tendency for government agencies to apply an excessive discount to losses attributable to agency programmes.[25] An explicit compensation requirement would transform private losses into a specific money drain on resources otherwise available to the agency, thereby creating internal incentives to consider them seriously in cost-benefit analyses. In other words, would concealment of divergences between private bureaucratic preferences and social preferences be rendered more difficult by a requirement that the costs of public sector proposals be made explicit?

Even if compensation payments fully reflected all costs associated with a proposal, this would still leave ample room for manipulation of valuations of the benefits. Moreover, as we have sought to show, non-negotiated compensation payments will not reflect real welfare losses and are thus amenable to some measure of manipulation. Given that neither the benefits nor the costs of a proposed course of action are (at least fully) internalized to the bureaucrats and politicians involved in the decision, it is difficult to predict how a requirement of actual compensation payments is likely to affect public sector incentive structures or to discern any clear linkage between such payments and welfare-maximizing outcomes. The only unambiguously positive effect of an explicit compensation requirement would be a reduction in the incentives for bribery. Potential losers who can

count on full compensation are less likely to offer bribes to induce politicians and bureaucrats to redirect the losses to others.

(b) Compensation and Transaction Costs

An argument sometimes made against a compensation principle is that the transaction costs entailed in identifying all losers from deregulation and valuing their losses, especially given the tendencies pre-existing in economic and political markets towards discounting and loss shifting, are likely in many cases to outweigh the benefits of compensation.

Kitch produces some telling examples where transaction costs might well exceed the amount of the compensation in question:[26]

> Take, for instance, the problem of "buying out" regulation of commercial radio broadcasting. This would seem to present an unusually easy case for use of the strategy. Present holders of broadcast licenses could simply be given perpetual transferable rights in place of their present 3-year licenses. No payment would be required from the Treasury, and in one stroke all the regulation connected with the 3-year renewal process-principally programming control related to fairness and community service-would be eliminated. But who can doubt, given the strong opposition to the proposal to extend broadcast license terms to 5 years, that such a proposal would fail to quiet all opposition to such deregulation? Other groups who benefit from the existing regulatory scheme would come forward to urge their claims. Local ministers would fear a reduction in available free air time. Local politicians would fear a reduction in local public affirs programming. And those station personnel, lawyers, and government employees now involved in the process might fear a reduction in work to be done. Others, spurred on by the prospect of reward, might put forward claims more

spurious but difficult to distinguish. Could newspapers claim injury on the ground that radio stations, freed to plan their programming without regulatory supervision, would become more effective competitors?

A similar scenario can be predicted in other regulated industries. Are we to compensate small communities for less air and trucking service, business air travelers for higher load factors in airplanes, travel agents and affinity groups for loss of charter business, truckers for railroad deregulation, railroads for trucking deregulation, and so on? Imagine the claims that would arise from deregulating the finance industry. Claims by future home buyers who would pay higher interest rates if the elaborate devices designed to channel credit into family houses were abandoned. Claims by banks for permitting savings and loan associations to offer competing interest rates on time deposits. And claims by money market funds for lifting the prohibition on interest on demand deposits. The fact that many claims would be spurious, if not offset by other benefits to be obtained by the claimant from deregulation, would not destroy their prima facie plausibility.

In a number of industries, the claims of employees will be important. In trucking and aviation, there is evidence to suggest that the principal effect of the regulation has been to strengthen the hand of employee unions by eliminating the possibility of entry by unorganized firms. These groups will claim the difference between their actual wages and the competitive wage rate.

Downs, in evaluating the case for compensating losers from urban highway and renewal programmes, identifies the following classes of losses:[27]

THE KINDS OF LOSSES IMPOSED UPON RESIDENTIAL HOUSEHOLDS BY URBAN HIGHWAY AND URBAN RENEWAL PROJECTS (OTHER THAN PAYING FOR CONSTRUCTION COSTS)

A. Losses imposed upon residential households by displacement itself:

1. Disruption of established personal and other relationships;

2. Losses due to the taking of real property;

3. Losses due to home financing arrangements, especially contract buying;

4. Costs of seeking alternative housing elsewhere;

5. Costs of paying for alternative housing elsewhere;

6. Moving costs; and

7. Higher operating costs of residing elsewhere.

B. Losses imposed upon residential households by uncertainties and delays:

8. Deterioration in the quality of life during waiting periods;

9. Inability of property owners to sell property at reasonable prices during waiting periods;

10. Declines in the value of properties during waiting periods because of neighborhood and individual property deterioration;

11. Losses of income suffered by owners of rental property because of the departure of tenants before actual taking occurs; and

12. Costs of maintaining property after its fair market value has been established for purposes of litigation.

C. Losses imposed upon residential households not directly displaced but located in surrounding areas:

13. Higher taxes paid because of increased city costs to counteract vandalism and other deterioration in the area;

14. Disruption of local communications through the blocking of streets;

15. Reduction in the quantity and quality of commercial and other services available in the area because they have left or been displaced;

16. Reduction in employment opportunities and increased costs of traveling to work because firms have been compelled to move elsewhere or have gone out of business;

17. Spillover effects of deterioration in the clearance areas during the waiting periods;

18. Higher rents or housing prices because of increased competition for housing among low-income households resulting from displacement;

19. Reduction in the efficiency of community facilities through:

    a. Loss of patronage if displacement has removed customers;

    b. Overcrowding if displacement has removed alternative sources of supply (such as a local school);

20. Losses in property values due to changes in the accessibility of various parts of the metropolitan area;

21. Losses resulting from congestion, vibration, noise, street blockage, dust, and other negative factors involved in the process of constructing the new highway or urban renewal project; and

22. Losses in property values due to increased ugliness, noise, air pollution, or other adverse effects of the completed highway or urban renewal project.

Obviously, the resources required to trace out and value all these types of losses are likely to be massive. Moreover, the costs of a programme of explicit compensation may often include a substantial component of error costs. For example, it may often be difficult to distinguish losses which are caused by some legislative measure from those attributable to extraneous forces. Additional indirect social costs may also be generated if the particular compensation programme chosen creates disincentives for efficient adaptation to changes in regulations or other public policies. Implicit forms of compensation, such as grandfathering or

transfer payments which are not based on proof of actual losses, economize on the direct and indirect costs associated with explicit compensation mechanisms, but carry their own peculiar disadvantages. Exemptions from or delays in the implementation of an efficiency-enhancing regulatory reform will generate social costs in the form of reductions in the present value of the net benefits expected from the policy change. Moreover, compensation schemes which employ transfer payments that are not awarded on the basis of proof of actual loss will usually possess rather low "target efficiency" - they are more likely to systematically over or undercompensate losers.[28]

If the measurement and computational problems involved in assessing the costs of providing compensation seem daunting, the cost-benefit analyst will encounter even more profound difficulties in assessing the social benefits, in terms of economic welfare, that are likely to be secured by compensating losers. One possible approach to conceptualizing the efficiency gains from compensation is explored in the next section of the paper. Here we simply wish to note that if it is conceded that compensation should not be offered when the costs of processing a claim exceed the benefits from compensation, then we are reduced once again to comparing notional benefits against notional costs. In the absence of a general social welfare function, we will never be able to make firm judgments as to whether a proposed compensation principle will increase social welfare. The following

discussion of individual preferences concerning the bearing of risks from regulatory change illustrates the well-known impossibility of specifying a general welfare function.

(c) Compensation and Uncertainty

An argument that might be advanced for an expansive compensation principle grounded in welfare maximizing considerations is that in the absence of such a compensation principle there will be a generalized increase in the level of risk in the economy. Voters and other interests have to contemplate an increased possibility of uncompensated losses as a result of perhaps capricious and unpredictable collective decisions. In limiting cases, such as the proverbial "banana" republic, uncompensated government takings may force the rate of return demanded by investors up so high that a reduction in investment and economic activity generally is the consequence. The argument, accordingly, is that a compensation principle, by reducing investment and related risks, improves economic welfare.

This aspect of the allocative implications of the choice of a compensation principle is what Frank Michelman has called demoralization costs.[29] These refer to the resources consumed by secondary or adaptive responses taken by those who are made subject to what they regard as capricious redistributions. When any collective (or private) institution makes a decision which increases the general level of risk

or uncertainty, a welfare loss is imposed on all individuals who possess a preference for risk avoidance. Risk-averse individuals will be confronted with three options in deciding how to respond to uncompensated private losses imposed by state action: 1) they may insure through various kinds of contractual arrangements; 2) they may diversify or otherwise reduce their participation (i.e., investment) in the activity giving rise to the risk; or 3) they may bear the risk and continue as before. Thus, the efficiency argument for compensation is that when it is costly for individuals to insure or diversify away certain risks, risk-averse citizens may be willing to pay a lot to shift those risks to the public treasury. Moreover, Michelman argues that the demoralization costs avoided by a compensation principle for collectively-imposed losses are likely to be systematically greater than the benefits from compensation programmes aimed at losses which are not attributable to state action. Michelman asserts that individuals who suffer harm as a result of state action experience a special kind of disappointment and anxiety when they have reason to suspect that they have been victimized by some legislative decision. It is argued that this sense of being taken advantage of for the gain of others gives rise to additional social costs in the form of investments in risk avoidance. In the limiting case (i.e., the "banana" republic), these added costs of disaffection may be incurred not only by the losers, but also by many other citizens who sympathize with their plight and fear that they may be similarly situated in the future.

Michelman's analysis of the potential welfare gains from a compensation principle is ingenious; we employ it later in our discussion of the ethical issues implicated in the design of a compensation practice. From an efficiency standpoint, however, it seems clear that Michelman's analytic framework will not yield any operational test for ascertaining the welfare consequences of a compensation principle. The measurement of demoralization costs would require some method for determining individual preferences for risk bearing and for making direct inter-personal welfare compensations. Without some operational concept of a social risk optimum, which would necessitiate the specification of a general welfare function, it is difficult to make any strong efficiency argument for a practice of requiring compensation for collectively imposed losses. Moreover, short of limiting cases it is difficult to attach a great deal of plausibility to Michelman's risk reduction argument for compensation of losses imposed by deliberate state action. As Posner points out, investors must take account of a vast multitude of risks in making investment decisions, and the presence or absence of an expansive compensation principle is likely to have a relatively trivial effect on their investment calculus.[30] Other kinds of more serious risks presumably constitute more substantial disincentives to economic activity, e.g. floods, hurricanes, international hostilities, oil cartels, technological innovations, etc., etc. Thus, the risk-reduction thesis, without more information about individual risk preferences, does not appear to provide any determinate

basis for discriminating between or among classes of losses. It might well be construed to support a case for indiscriminate compensation for all losses generated by governmental activities. This is not a helpful conclusion for policy-makers looking for a more finely-focussed principle.

(d) Compensation and Rent-Seeking

An argument sometimes made against a compensation principle on efficiency grounds is that it would engender an increase in rent-seeking activities because the returns from securing favourable forms of regulation are correspondingly increased.[31] Kitch argues further that a compensation principle increases the incentive for an industry that has been deregulated to seek reregulation: "Even if the original recipients of the buy-out honour an implied promise to retire from the field rewarded, their successors may wish to emulate their predecessors".[32]

This line of argument does not seem particularly persuasive. While it may be true that a compensation principle may increase incentives to seek favourable forms of regulation in the first instance (or subsequently, reregulation) it is also true (as proponents of compensation, such as Tullock, centrally argue) that the existence of a compensation principle reduces incentives to oppose the withdrawal of existing forms of regulation (deregulation). Whether the increase in social resources invested in attempting to

secure favourable regulation under a compensation principle would be greater than the decrease in social resources invested in defending existing forms of regulation under a compensation principle is an empirical question about which it would seem difficult to even guess at orders of magnitude either way. Thus, rent-seeking considerations would not seem to support a clear case either for or against compensation on efficiency grounds.

(e) Compensation and Pecuniary Externalities

An argument sometimes made against compensation for losses associated with regulatory change is that for the most part the losses entail pecuniary externalities from collective decisions and no more justify compensation on efficiency grounds than do pecuniary externalities from private market exchanges.[33]

The argument is developed as follows. Assuming Coasian considerations are met,[34] generally speaking, we regard it as a condition for allocatively-efficient outcomes in private markets that firms are faced with the full social costs of their productive activities, so that consumers buying the output from these firms will receive accurate price signals as to the cost of the social resources involved in its production. Thus technological externalities, such as environmental damage, should in many cases be internalized as a cost of production. On the other hand, we generally

accept that if a firm inflicts losses on other firms and perhaps, derivatively, on various third parties, as a result of offering a superior, i.e., more highly-valued product, these losses should not be the subject of compensation. To require compensation here would be to reduce competitive incentives and distort market signals to firms producing less highly-valued products who, under the spur of the losses sustained at the hands of more successful competitors, should re-allocate resources involved to more highly-valued uses, i.e., in the vernacular, shape up or ship out. Thus, in private market activity, we draw a distinction between the way we view losses from technological externalities and losses from pecuniary externalities.

In the case of losses from state action, it is not clear that this distinction serves nearly as well. Take the following case: a public authority decides to reroute a highway, and in order to do so, needs to demolish a service station alongside the present highway. One might view this as a technological externality associated with the decision to reroute the highway and justify the well-sanctified practice of paying compensation in these circumstances on that basis. On the other hand, suppose a decision is made to reroute the highway in a way that leaves the service station physically untouched, although redirecting traffic so as to leave the service station without any clientele. If one treats this relocation decision as equivalent to a market judgment that one product is superior to another, i.e., one

highway location is superior to another, then presumably no compensation should be paid. But does this analogy hold?

In a private market, we know that consumers value one firm's product more highly than another's if they are prepared to vote their dollars in favour of the first firm rather than the second, and we generally accept that the second firm should not be shielded from this judgment. However, the mere fact that a collective decision has been taken in favour of a particular course of action cannot necessarily be construed as welfare-maximizing, i.e., moving resources to some more highly-valued social use rather than simply redistributing the resources from one group to another, given both the potential for majoritarian coercion of minorities, and the tendency for concentrated minorities to exert disproportionate influence on legislative decisions in which they possess relatively high per capita stakes.

If one were to assume that collective preferences expressed through the political process were always intended to maximize social welfare, it is difficult to see why compensation should be paid on efficiency grounds, even in cases involving physical takings, i.e., technological externalities. In other words, if society has judged that it will derive more benefits from the relocation of a highway than the social costs that will be incurred, e.g., by the owner of the service station to be demolished, the payment of compensation to the service station owner would be a mere

transfer and have no allocative effects. On the other hand, if collective decisions taken through the political process cannot, by definition, be regarded as welfare maximizing in the absence of a willingness to compensate for private losses, this reasoning would also seem to apply without qualification to the case where the highway is relocated leaving the service station owner without any through-traffic.

We conclude, therefore, that an argument against compensating for losses from regulatory changes on efficiency grounds cannot be persuasively made by reliance on any distinction between pecuniary and technological externalities.

(f) Compensation and Adjustment Assistance

A form of "compensation" for regulatory change may be justified on efficiency grounds if the benefits conferred on prospective losers improve the rapidity or appropriateness of their adjustments to shifts in market conditions triggered by legal reforms. It has recently been argued that capital market imperfections justify government provision of subsidized credit to firms like Massey-Ferguson and Chrysler; proponents of assistance assert that the financial difficulties of these firms are short-term phenomena and that help is necessary to avoid the wasteful dismantling of what will become valuable enterprises.[35] While this argument may have some surface plausibility, its underlying claim of capital market failure

lacks empirical support. A more credible efficiency justification for adjustment assistance is that imperfections in labour and capital markets inhibit employees, whose human capital has been, or will be, depreciated by regulatory change, from making optimal relocation, retraining or reemployment decisions.[36] Private decisions on the part of employers and employees may not provide a socially optimal amount of training if employees cannot afford the costs of training and cannot borrow because of an inability to use their human capital (future earnings) or collateral for a loan. Moreover, private markets may yield a less than socially optimal amount of training to the extent that training generates external benefits that are not reflected in market values.[37] However, while a theoretical case can be made out for government-sponsored training programmes, the empirical evidence on their effectiveness seems to be quite mixed.[38]

Similarly, a case can be made out for government-sponsored job placement programmes to redress information imperfections in labour markets. Other forms of intervention may also reduce lags in the adjustment process, such as compensation to overcome the high direct and psychic costs of moving and reduction of artificial barriers to mobility (such as region-specific occupational licensing laws).[39]

It should be noted that existing public programmes aimed at facilitating adjustment, such as job placement and training services, do not generally take the form of direct,

explicit compensation for losses attributable to any specific cause, such as regulatory reform; nor is there any good reason, from the standpoint of social efficiency, why they should be confined to any relatively narrow subset of potential losers. There is, however, one prominent example of adjustment assistance which has been specifically designed to aid employees and, to a lesser extent, investors injured by changes in regulatory policies - the United States Trade Adjustment Assistance Program (TAA). While Canada has experimented with similar measures for industries subjected to vigorous import competition as a result of tariff cuts, the United States TAA system is a much more comprehensive and elaborate scheme.[40] Moreover, the TAA programme has been intensively studied, and recent assessments of its performance provide some concrete illustrations of the difficulties which must be surmounted in the design of effective adjustment measures. The crux of these design problems lies in the fundamental incompatibility of "assistance" and "adjustment": one of the surest ways to bring about adjustment is to provide no assistance, and many particular forms of assistance, aimed at compensating for the burdens imposed by trade liberalization, dampen the incentive to adjust. Moreover, the perfomance record of the TAA programme suggests that its failure to encourage adjustment is not attributable to any significant defects in its standards or administration, but rather to the political dynamics of explicit compensation. The TAA record suggests that any scheme with the dual objectives of compensation and

adjustment will be subjected to strong pressures to emphasize the former goal at the expense of the latter.

Title II of the Trade Act of 1974 establishes the criteria for eligibility and program benefits to workers.[41] Petitions seeking a finding of eligibility must establish that at least 5 percent of the workers in a firm are unemployed or have suffered at least a 20 percent reduction in their hours of work and wages. Moreover, the applicants must show that their unemployment or underemployment is at least partially attributable to contemporaneous increases in imports. TAA benefits available to eligible workers include "trade readjustment allowances" of up to 70 percent of the displaced workers' previous weekly wages, training and related services (e.g., testing, counseling, placement and support services) and relocation allowances. Benefits are generally provided up to a maximum of 52 weeks; workers 60 years of age and older at separation may receive up to 26 additional weeks of trade readjustment allowances. Any eligible worker, regardless of age, may also receive an additional 26 weeks of income supplements when these payments are necessary in order to allow the worker to complete an approved training programme.

The TAA programme's emphasis on compensatory objectives is demonstrated by the fact that its eligibility criteria do not distinguish between temporary and permanent lay-offs. Recent studies indicate that almost 75 percent of the workers who received benefits under the programme returned to their former

employers.[42] No clear adjustment (efficiency) motive exists for TAA eligibility for temporarily displaced workers because it is not obvious that these employees should leave the industry on economic grounds. Analysis of recipients by industry classification show that much of the assistance is being paid to workers in cyclically depressed industries (e.g., autos and steel); less than one-half of all recipients were employed in industries which have apparently lost their long-run comparative advantage (e.g., textiles, footwear, apparel, etc.).[43] Moreover, there is substantial evidence that compensation for wage losses due to temporary lay-offs and reduced hours of work has neutralized market pressures for adjustment. Of the 494,000 employees certified as eligible up to September, 1979, only about 4 percent were placed in new jobs through the programme, only 3.5% entered training courses and less than 1% received job search and relocation benefits.[44] From the standpoint of social efficiency, it is clearly preferable to have, for example, one-half as many full-time workers in an industry (with the displaced workers in other jobs) than the historical industry work force all working half-time. Generous TAA benefits may even have brought about a perverse expansion in the number of workers eligible for assistance since employers do not pay any financial penalty for laying-off workers who will be supported by TAA wage supplements.[45]

If the promotion of adjustment was the primary goal of the TAA programme, the existing scheme could be redesigned to require retraining, relocation or active pursuit of alter-

native employment as a condition to eligibility for assistance. "Human investment" tax credits for industries hiring workers who have been displaced by imports might also be a promising strategy for facilitating adjustment. While the design of adjustment schemes implicates difficult and controversial issues concerning the optimal mix of incentives and the appropriate role of government, the disappointing performance of the TAA programme cannot be attributed to a lack of administrative innovation. As long as compensation for workers injured by trade liberalization remains a goal of the TAA programme, any attempt to draw lines between those temporarily unemployed and those permanently displaced will, to some extent, be arbitrary and involve a certain degree of unequal treatment. If compensation for those injured by legal change is accepted as a legitimate goal, there will be strong political pressure on legislators and administrators to avoid eligibility criteria which employ apparently arbitrary distinctions based on the relative sizes of losses incurred by different groups of employees and investors. These pressures might be successfully resisted if there were some widely accepted ethical justifications for such distinctions. More to the point, what is the ethical rationale for special treatment for those injured by trade liberalization or regulatory reform? It is to this question that we now turn.

VI. Compensation and Ethical Theory

(a) Introduction

This section of the paper focuses on the problems of transitional equity which are likely to arise from the implementation of regulatory reforms. Major regulatory changes will alter the distribution of benefits and burdens among members of the political community; some investors and employees may incur substantial private losses during the course of transition to a new regulatory regime. The high probability of such transitional effects raises the question of when it might be appropriate to compensate or ameliorate the losses of those who will be disadvantaged as a consequence of changes in regulatory policies. Any systematic answer must be derived from some general theory which attempts to provide a full account of the moral relations between the citizen and the state. This portion of the paper surveys those aspects of mainstream ethical theory which seem to possess special relevance for the problem of compensation in liberal democratic political communities. The aim of our analysis is to provide some concrete suggestions on how ethical theory might be employed to structure and reconcile our moral intuitions concerning the appropriate role of compensation in regulatory reform. Much of what we have to say builds on Frank Michelman's seminal analysis of the American constitutional law of government "takings" and just compensation.[46] Michelman argues that the American "takings"

jurisprudence should be viewed as an attempt to reconcile the conflict between the desire for continued material progress and the widely-shared concern for fair treatment of individuals. We conclude that this tension between economic efficiency and justice animates most, but not all, of the ethical dilemmas posed by current proposals for regulatory reform.

To turn to moral philosophy for help in trying to decide "what to do" is somewhat disappointing. This is because most philosophers avoid ultimate questions about actual ethical choices; they prefer to concentrate instead on the preliminary problem of how to go about thinking about what to do. Most philosophers who have addressed this preliminary problem are divided into groups: those who do and those who do not think that philosophical inquiry should be conducted by trying to decide what course of action will yield the best overall consequences. A "consequentialist" approach directs that one choose that action or institutional arrangement which yields the "best" results, leaving open the question of what values count as "best". Utilitarianism, one of the two theories we discuss at length, is a consequentialist theory which proceeds from the assumption that individual happiness or utility is the value to be maximized; some variants of utilitariansm specify average rather than aggregate utility as the appropriate maximand, but we will confine our analysis to the classical formulation which adopts total utility as the appropriate criterion.[47]

Utilitarian theory seems especially relevant to the problem of justice in liberal democracies because of its adherents' claim that the basic features of the theory can be derived from an essentially individualistic and egalitarian ethic.[48] Utility theory rejects any notion of collective welfare (i.e., the "public interest") which abstracts from the satisfaction or happiness experienced by individual members of the political community. Moreover, it assumes the moral impossibility of ranking individual claims to satisfaction as intrinsically superior or inferior to one another.

There is, however, a well established non-consequentialist or "deontological" approach to moral theory that proceeds from the basic idea that something else besides consequences count in making ethical choices. Philosophers of a deontological bent, who also subscribe to individualistic and egalitarian premises, assert that ethical truth must lie not with a doctrine that takes the maximization of total utility for its goal, but with a theory of basic human rights, protecting specific basic liberties and interests of individuals. This general category of deontological theory is often referred to as Kantian because it focuses on the central idea of Kant's moral theory, the idea of respect for human autonomy. Most contemporary Kantians assert that there is a basic contradiction between utility maximization and an appropriate level of concern for the separateness of persons; they claim that utilitarians fail to respect individuality because their theory justifies harming one person if

others benefit more than he suffers.[49] Utilitarians counter that deontological theories are inconsistent with the core meaning of equality - that each person's preferences or claims to satisfaction "are to count for one and no more than one" in ethical calculus. They admit that utility theory may sometimes permit the imposition of unequal burdens, but insist that a failure to maximize utility would imply that the preferences of losers had been ranked as superior to those of gainers, a violation of the equality principle.[50]

These very old philosophic claims about human automony and equality do seem most accurately to reflect the moral tension between collective and individual interests which animates the compensation questions arising from regulatory changes. The strong appeal of most reform proposals lies in their common claim that consumers will gain substantially more than the current beneficiaries of regulatory programmes will lose (i.e., we assume the possibility of a subset of reforms which will disadvantage no one). Yet the Kantian injunction against using persons as "means rather than ends" suggests that an exclusive concern with net social benefits ignores other fundamental ethical considerations. How can the imposition of uncompensated losses on some individuals ever be justified by the fact that others gain more than they lose from the regulatory change? Any coherent answer to this central question requires something more than a stark choice between the abstract principles of utilitarian

and Kantian theories. Utilitarians and Kantians ground their theories on identical premises, yet they sharply disagree on the content of the moral principles, and the rights and institutional arrangements derived from them, which most faithfully embody the ideas of human individuality and equality. The method of moral philosophy consists of the deduction of the formal elements of an ethical theory from one or more premises or assumptions. Since these ethical premises are the product of introspection or intuition, the theories derived from them are not susceptible to objective validation. The "best" theory is the one which provides that set of principles and institutions that most accurately reflects the content of our moral beliefs. The only test of a moral theory is the correspondence between the results or guidance which it provides in concrete cases, and our intuitionistic judgments about how those ethical dilemmas should be resolved.[51] The important point for our purposes is that the application of abstract moral principles to the real-life problems of regulatory reform requires the analyst to also address difficult questions of behavioural science. Kantian and utilitarian principles are incapable of dissolving moral dilemmas by themselves; they can only provide concrete guidance when combined with specific behavioural propositions about markets, political institutions and human psychology. The necessity of erecting philosophic analysis on controversial behavioural assumptions creates problems of vagueness or indeterminacy for both Kantians and utilitarians. In some cases these problems of indeterminacy can completely

obscure any difference in the results or directives derived from these two competing approaches to moral theory.[52] While it is true that the gaps in our scientific knowlege do impose substantial limits on the operationality of moral principles, ethical theory has a legitimate role in political decisions because it provides a systematic method for organizing and harmonizing our intuitions about the fairness of majoritarian decisions. Moreover, it is not a fatal objection to philosophical analysis that competing moral principles may often require or forbid the same actions; the purpose of analysis is to evaluate the differing ethical justifications that the rival theories provide for the actions or results they support.

Our analysis is limited to the general problem of transitional equity in regulatory reform. We are principally concerned with various forms of price and entry regulation, and we therefore assume that the primary collective motive for changes in these regulatory programmes is to secure gains in economic efficiency. We also assume that the proposed regulatory changes are not advanced on solely redistributive grounds; if they are ethically justified as purely redistributional measures, the payment of compensation would, of course, be a logical absurdity. Moreover, our survey of ethical theories is limited to those which justify a substantial regulatory role for the state, either with or without some form of just compensation. Thus, we do not consider certain Kantian theories which condemn most forms of collectively-imposed redistribution, irrespective of the offer of some form of compensation.[53]

Finally, as mentioned earlier, we do not attempt to provide an account of the political constitutions which might be derived from either utilitarian or Kantian principles.[54] Rather, we abstract from specific constitutional considerations by assuming that the compensation questions must be resolved by a majority vote of democratically chosen legislators, all of whom share a distinct set of ethical premises. Our basic aim is to discover how the compensation policies enacted by some hypothetical Kantian parliament might differ from those chosen by a legislature composed of well-socialized utilitarians.[55] We examine two paradigmatic cases of regulatory change: the imposition of a new regulation and the repeal or substantial modification of an existing regulation. The first case can be formulated in a way that most lawyers will recognize as the semi-famous "factory in the wilderness" problem.[56] Assume that the owner of a polluting factory selects a site for his plant in an uninhabited rural area, and operates his establishment for many years without official complaint. A nearby town becomes an attractive location for development, and residential construction takes place in close proximity to the polluting factory. For a long time, the factory continues to pollute and nothing happens, except for an occasional complaint from neighboring landowners. Suddenly, a new environmental protection regulation is adopted and, after a careful cost-benefit analysis, the regulators conclude that it would be efficient for the plant to either close down or install expensive emission control equipment. Should the owner, whom we will assume is the sole shareholder,

be compensated for his losses? Assume also that demand for the plant's now higher priced output falls, and that ten employees must be laid off. If the discharged employees must accept new jobs at lower wages should they also receive compensation for their losses?

Our second hypothetical case of regulatory reform is slightly more complex. This is the case of the disappointed trucking firm owner whose license has been withdrawn as a result of a legislative decision to "deregulate" his industry. In this case (as in most of the real cases), the legislature never made clear the exact nature of the interest it was conferring on the members of the industry at the time the regulatory regime was created.[57] Certain features of the regulatory programme (i.e., prior approval requirement for license transfers) may have suggested that the state intended to grant only a limited privilege, revocable without compensation for any non-discriminatory policy reason. Other features of the programme's administration, such as a non-competitive renewal process or pro forma approval of transfer applications, may have suggested that the licensees, or at least their predecessors in interest, had been granted some form of property right. Moreover, assume there is evidence that the regulators at least gave their tacit approval to the existence of an established market in these licenses, a market in which the licenses changed hands for substantial sums. If we assume that the disappointed trucker purchased his license a few years ago, that is, he detrimentally relied

on the continued existence of entry controls long before the deregulation proposals were publicly mooted, should we grant his claim for compensation? Assume also that the regulators have traditionally required the trucker to provide cross-subsidized service to several rural communities, which are not served by any alternative mode of freight transport. Commercial shippers in these small towns will incur large shipping cost increases in a deregulated transport market. Certain firms may even decide to close down their rural plants; some of these plant closings may impose heavy losses on employees, local merchants and service providers, and even local landowners. Should these losses, causally attributable to deregulation, be identified, measured and compensated?

(b) Utilitarianism

In a world of perfect information and costless bargaining, a utilitarian legislature would always insist on negotiated compensation for the losers from any public programme designed to advance economic efficiency. Since, as we mentioned earlier, there is no verifiable method for subjecting human happiness to cardinal measurement, negotiated transfers for the losers would remove uncertainty concerning the programme's utility-maximizing consequences. Information and bargaining are, however, very costly, and we shall assume that the legislature has determined that the costs of negotiated settlements would exhaust the net benefits of most of the projects on the legislative agenda. Therefore,

the legislature decides to introduce the compensation issue into its own deliberations on the merits of possible efficiency-enhancing measures, employing proxies, such as dollars, and educated guesses to assess likely utility gains and losses. Based on our prior discussion of Michelman's idea of "demoralization costs", it seems probable that a utilitarian legislature would resolve our hypothetical compensation questions by comparing the disutility or demoralization costs likely to be generated by a refusal of compensation with the probable direct and indirect costs of compensating losers.[58] As we indicated earlier, Michelman argues that individuals who suffer harm as a result of deliberate state action may experience a special kind of disappointment and anxiety when they have reason to suspect that they have been victimized by some legislative decision not in accord with sound utilitarian calculus. Because of the ambiguities inherent in any external assessment of utility gains and losses, well-socialized utilitarians may often disagree on ethical judgments which involve complex factual and behavioural issues. A sincerely held belief that one is being taken advantage of, without any sound ethical basis for the imposition, gives rise to a form of disutility that Ackerman has labelled "disaffection cost".[59] It is this idea of disaffection cost which differentiates collectively imposed losses from the losses incurred as a result of auto accidents and hailstorms. The second, and more general, form of disutility that may result from regulatory change has been referred to as "uncertainty cost", that sense of discomfort or anxiety that arises from

the prospect of any significant misfortune, no matter what the cause.[60] Human aversion to risk and the consequent moral necessity of social and political institutions designed to create security of expectations have traditionally been accorded a central role in utilitarian theory.[61]

While the legislature will wish to avoid as much of these two forms of disutility as possible, it must also take into account the costs of identifying and measuring losses, and delivering some appropriate form of compensation to losers. These "settlement costs" are probably most susceptible to measurement in dollars, yet for certain forms of implicit compensation (i.e., grandfathering or delay) the full indirect costs may be difficult to calculate.[62]

The general problems confronting utilitarian legislators when efficiency-promoting regulatory reforms will impose substantial private losses is that either demoralization costs or settlement costs must be incurred. Thus, the utilitarian compensation rule will require compensation whenever settlement costs are lower than both demoralization costs and efficiency gains. This rule will, of course, bar compensation when settlement costs are greater than demoralization costs, unless the disutility suffered by the losers is sufficiently great to cancel out the gains from the regulatory change thus rendering the programme itself untenable on utilitarian grounds. In order to proceed with its deliberations, the legislators must identify the probable

sources of disutility from uncompensated impositions. Why might well-socialized citizens of a utilitarian state be demoralized if not offered compensation in the hypothetical instances of regulatory reform described earlier?

1. Reliance

A utilitarian compensation practice is likely to be especially concerned with regulatory changes which frustrate institutionally-grounded expectations.[63] This is because the frustration of those expectations which are backed up by evidence of detrimental reliance on some established institutional arrangement will be a potent source of uncertainty and disaffection. Recognition of the centrality of the reliance issue will compel the legislature to carefully examine its community's dominant, institutionallly induced expectations about regulatory change. Thus, in attempting to identify those losses which are especially likely to generate disutility, the legislature will ask: what kinds of expectations concerning regulatory change were reasonable under the specific circumstances of this case? The answer to this question can only be discovered through an investigation of the dominant patterns of behaviour embedded in the community's economic and political arrangements. We shall first discuss the background conditions for expectations arising from economic markets; we then discuss the same issue with respect to political markets.

(a) Ex Ante Distribution

The growing literature on the "rational expectations" hypothesis, which we discussed earlier, indicates that there is substantial objective evidence of ex ante distribution of the risks of legal change through various types of contractual arrangements.[64] For example, the exchange price of assets subject to the risk of legal change will often be discounted to reflect their lower expected value. Moreover, we observe implicit insurance arrangements and the diversification of physical and human capital investments in apparent response to the risks created by possible changes in government policy. From a utilitarian standpoint, the presence of ex ante risk spreading through market transactions would seem to contradict, or at least render highly suspect, any ex post claim of demoralization. If the conscious acceptance of the risk of change was a voluntary gamble, there is no reason why a well-socialized utilitarian should experience any special uncertainty or disaffection when the anticipated risk of legal change eventuates in a loss. In fact, it seems unlikely that a good utilitarian loser would suffer any disutility when his assumption of the risk of legal change was both conscious and voluntary. In cases such as this, Posner argues that it makes sense to characterize the disappointed investor or employee as the recipient of "ex ante compensation" since it can be assumed that he demanded some explicit or implicit premium in return for assuming the risk of loss.[65]

In light of these generally observed patterns of ex ante risk-spreading, the utilitarian legislature's analysis of demoralization costs should take into account the possibility that the risk of regulatory change was voluntarily assumed by the various groups of losers in our hypothetical cases. How can the legislature distinguish those cases in which there has been a voluntary ex ante assumption of risk from those in which there has not? One approach might consist of a special tribunal to interview all losers concerning their state of mind at the time when their investment or employment contracts were executed. But we shall assume that the legislature has good reasons for believing that such a subjective approach would entail prohibitive settlement costs, which should be understood to include error costs. What kinds of objective criteria might be employed to identify those cases in which the risk of regulatory change was consciously borne at the time of contracting?

One possible criterion might be the remoteness of the risk of regulatory change at the time of contracting. In both the polluter and trucker cases, the apparent probability of adverse legal change when the wilderness site was selected, and the license purchased, must have been very low. Yet the apparent remoteness of the risk would be a poor predictor of demoralization, unless the legislature were prepared to assume that very low probability events with substantial adverse effects are systematically ignored in individual risk assessment.[66] While there is some evidence to support

this hypothesis of systematic perceptual bias in risk assessment, there is much stronger evidence that rather remote risks of a serious nature are factored into investment and employment decisions, depending on the quantity and quality of the actuarial information available to the parties.[67] Thus, it seems plausible to assume that the legislature will not focus on any single factor, such as the remoteness of the risk, in its attempt to discern the dominant pattern of expectations concerning the risk of legal change. It should be clear that any sort of particularized demoralization cost analysis can only proceed as a crude "line-drawing" exercise. Whether reliance on the status quo was justified, on some objective basis, does not lend itself to any determinate or absolute judgment; if some investor's or employee's relative lack of information, measured against some imaginary baseline of actuarial certainty, made an erroneous assessment of the risk of change relatively more likely, then demoralization costs will be greater, ceteris paribus. A brief analysis of our two hypotheticals reveals the indeterminacies which are likely to impede any ex post examination of rational expectations.

Recall that the owner of the polluting factory constructed his plant in an uninhabited area; at the time the plant site was purchased, the factory was not known to be incompatible with any of the existing land uses in the area. Moreover, there were no zoning restrictions or environmental controls which would have precluded the use of the land as a factory site. These special facts provide some

strong support for a claim of justifiable reliance on the continuation of the status quo yet, even in strong cases like this one, there will be other background factors which could be viewed as foreshadowing the risk of future regulatory change. Perhaps the most important one is the owner's knowledge that his use of the wilderness site "spills over" in a manner which will preclude some alternative future uses for the lands surrounding his plant. It can be argued that dominant social views, expressed in ordinary notions of ownership and trespass, justify limiting the owner's expectations concerning the permissible uses of his land to those uses which will not impose substantial burdens on his neighbors.[68] Moreover, under established nuisance law, the factory owner could not rely on his prior possession of the site to defeat an attempt by the residential owners to enjoin the pollution. In spite of the fact that the residential owners came to the nuisance, their right to an injunction would turn on whether the factory owner's use of his site was a "reasonable" one, based on the dominant use patterns in that area, prevailing community sentiments concerning tolerable levels of pollution, etc.[69] The law of nuisance can be viewed as a signal or prior warning to the purchaser of a wilderness site that land use patterns and social attitudes concerning the reasonableness of particular uses are subject to change, and that he must bear the risk of future adverse regulation.

Similar uncertainties will arise when our utilitarian legislature attempts to ascertain the expectations of

licensees concerning the risk of some future programme of trucking deregulation, a risk which has now eventuated in the threat of substantial losses. Recall that the licensee in our hypothetical case paid the going market price for his license before the deregulation proposal was announced or widely-rumoured. The statute and regulations establishing the licensure scheme were silent as to the nature of the interest being conferred on licensees. Moreover, the administrative practices in existence at the time the license was purchased did not provide any unambiguous warning that the license should not become the object of expectations of continuing enjoyment. Yet, just as in the case of the factory owner, there are background factors which will cut against a claim of justifiable reliance. Certain features of the regulatory programme (i.e., prior approval for license transfers) would support an inference that the state intended to confer only a limited privilege, revocable without compensation, and nothing in the statute or regulations directly contradicts this characterization of the licensee's interest. Moreover, established judicial approaches to drawing the distinction between rights and privileges seem to possess the same elasticity or "open-textured" quality present in the reasonableness test of nuisance law. Some decisions hold that clear proof of an affirmative grant from the state is necessary to establish a claim of right, while other decisions suggest that judges give at least equal weight to objective evidence of reasonable reliance by claimants in determining whether their state-created interest constituted either a right or privilege.[70]

Our utilitarian legislators, seeking practical and objective methods of ascertaining the relative magnitudes of the demoralization costs that will be borne by various classes of losers, are likely to throw up their hands in despair of arriving at any determinate conclusions concerning the expectations which animated the investment decisions of factory owners and licensees. Moreover, it seems unlikely that an ex post evaluation of the expectations of the other classes of losers (i.e., the factory owner's employees and the trucker's subsidized shippers) would yield any more certain judgments on the extent to which the risks of future regulatory changes were factored into their employment and investment contracts. There may, of course, be instances of legal change in which an objective analysis of expectations may yield determinate guidance. When a particular regulatory programme entails the direct allocation of valued things, such as licenses, subsidies, transfer payments, etc., the enabling legislation, or regulations promulgated under it, may provide a clear warning that the benefits conferred should not become the objects of expectations of continuing enjoyment. Many policy instruments which shape private expectations operate within institutional settings in which the risk of detrimental reliance on the continuing existence of a particular rule or policy will be fairly remote. For example, uncompensated changes in most tax laws and macro-policy instruments are sanctioned by established patterns of institutional practice which provide ample warning that these rules are subject to alteration in response to social

and economic contingencies. Our two hypothetical cases generate difficult reliance issues because land use controls and trucking regulations are substantially changed or repealed very infrequently, and private decision-makers must form their expectations in the absence of any established understanding concerning the risk of regulatory change.[71]

When confronted with hard cases like these, in which the evidence on rational or dominant expectations is in fairly even balance, the utilitarian legislators might adopt at least two different decisional strategies. They may conclude that the contradictory evidence on justifiable expectations should count neither for nor against the claimants and continue their search for other objective criteria of demoralization. On the other hand, they may treat close cases as creating a general, but perhaps rather weak, presumption in favour of compensation as long as other independent utilitarian grounds are also advanced in support of the claimants. Legislators who held a skeptical view of their capacity for assessing their constituents attitudes toward uncertainty would have a tendency to adopt such a presumption. Moreover, the fact-sensitive nature of reliance claims increases the probability that fair-minded utilitarians will often disagree on the reasonableness of a particular claimant's expectations. Close cases will entail a greater risk of substantial disaffection because the claimants and their supporters will be more likely to have sincere convictions concerning their entitlement to compen-

sation. Thus, skeptical utilitarian legislators would generally resolve the hard reliance cases in our hypothetical instances of regulatory change in favour of compensation, as long as other relevant utilitarian considerations were also in roughly even balance.

One final point concerns the relationship between demoralization and the voluntariness of some investor's or employee's decision to assume the risk of legal change. Recall that Posner's "ex ante compensation" argument suggests that demoralization costs will not be incurred in cases where the losers both consciously and voluntarily accepted the risk of future adverse changes in regulations. Whether a particular investment or employment decision was voluntary, in fact, is a subjective question, yet there may be cases in which certain objective features of the transaction will cast doubt upon any subsequent claim that the loser received full ex ante compensation for his assumption of the risk of legal change. The concept of voluntariness implies something more than that a particular choice was rational under the circumstances; a choice is clearly voluntary in the sense of accurately reflecting the decision-maker's preferences only when it occurs against a background of fair alternatives.[72] In short, when the alternatives to bearing the risks of legal change are substantially constrained, the individuals who assumed these risks are more likely to be demoralized if they must subsequently absorb heavy losses as a result of regulatory reform.

Consider the case of the employees who are permanently laid-off as a consequence of the imposition of more stringent emission control standards. If the employees' collective agreement or individual contracts failed to provide for security of employment in such circumstances, it might still be argued that they bargained for and obtained a higher wage in return for bearing the risk of regulatory change, and are therefore undeserving of any additional compensation. As we indicated earlier, it may often be unrealistic to assume that the employees possessed sufficient information concerning the risks of regulatory change to bargain intelligently on the allocation of those risks. But even if we assume that the employees bargained with full information, there may be special circumstances which limit their ability to obtain higher wages in return for bearing the risk or, alternatively, to make other offsetting adjustments in their economic activities such as diversification of their human capital. Employees who possess skills which are specialized to a particular firm or industry may lack the bargaining power to either secure ex ante compensation or to shift the risk of regulatory change to their employer. The same argument might be advanced on behalf of employees who live in isolated "one-industry" towns; their range of alternative employment opportunities is likely to be substantially constrained when relocation would entail heavy pecuniary and psychic costs. Moreover, it is generally more costly to diversify investments in human capital than to diversify holdings of financial or physical assets. Invest-

ments in human capital are also likely to entail higher current opportunity costs since bankers will usually refuse to advance funds in return for a promise of repayment from higher future earnings.[73]

While the precise relationship between voluntariness and demoralization will usually be resistant to external assessment, voluntariness considerations might lead a utilitarian legislature to adopt more liberal compensation policies for employees than for investors. Because their holdings can be more cheaply diversified to avoid the risks of regulatory change, owners of physical and financial capital will be less likely, ceteris paribus, to suffer demoralization than employees. The more constrained set of risk-bearing strategies available to employees increases the probability that, all other things considered, their assumption of the risk of change was not fully voluntary. A second, and somewhat stronger, argument can be made that employees with large investments in highly-specialized skills, and employees, business owners and other residents of isolated or economically depressed regions will confront higher opportunity costs than other classes of losers in shifting into alternative occupations or investments, especially when the shift will entail the costs of relocation. Because of the special constraints on their options for risk-bearing, these losers were less likely to have voluntarily assumed the risk of regulatory change, and are more likely to suffer demoralization when the change is imposed. This argument could

also be advanced on behalf of at least some of the residents of the isolated communities which will be adversely affected by the withdrawal of freight subsidies.

(b) Log-rolling

As we noted earlier, the vote-trading which drives pluralistic legislative processess obscures both the reasons for and the distributional consequences of past legislative decisions. The indeterminate nature of the outcomes generated by the log-rolling process will impose substantial constraints on our utilitarian legislators' ability to identify dominant patterns of private expectations in regard to legislative decision-making. Two general kinds of claims of justifiable reliance on some established pattern of political market outcomes might be advanced on behalf of the losers from regulatory reform. The first argument proceeds from the assumption that the distributional impacts resulting from legislative decisions have a general tendency to cancel each other out when they are assessed from the perspective of some median citizen's lifespan. This assumption receives support from well-known theories of imperfect competition in political markets which predict that collectively-imposed losses will generally be relatively small in size and randomly distributed over time.[74] Thus, the argument for compensation is that investor and employee expectations of long-run evenness are most likely to be frustrated by regulatory changes that impose losses which are large in relation to the loser's net

worth. Since the relative size of the loss from regulatory change will also have independent ethical significance in a utilitarian compensation practice, we will discuss the difficulties involved in operationalizing a size criterion in the next section.

The losers from regulatory change might also advance a second argument that, even though the reforms were fully anticipated, they expected to receive compensation for their losses.[75] The losers would presumably support their claim by attempting to marshall evidence of past instances of legal change in which losers whose objective circumstances were quite similar to their own did in fact receive some form of compensation. It should be noted that our mythical utilitarian legislators might not attach any moral weight to this form of argument; they might simply reply that these past decisions were taken on the basis of some mistake in applying their utility calculus, and that they should not have become the basis for expectations concerning future compensation questions. More skeptical or open-minded utilitarians might be more sensitive to claims of unequal treatment, yet the indeterminacies of the log-rolling process will invariably make these arguments much more slippery than they might at first appear. This is because the proponents of an argument based on legislative precedent must bear the burden of establishing that the reasons which justified compensation in those past cases apply equally to their own claim. The log-rolling process, however, shields the moti-

vations of legislators from any conclusive ex post examination. Consider, for example, the recent Chrysler loan guarantee programme.[76] Some supporters of the programme have argued that the firm's ills are primarily attributable to government actions - a sudden change in fuel pricing policies and the burden of new environmental and fuel-economy requirements. They view the bail-out as fair compensation. Other proponents of the subsidy have asserted that the company's distress is a short-term phenomenon caused by the current relative popularity of fuel-efficient imports. They argued that the subsidy is a socially efficient use of resources since it will avoid the wasteful dismantling of a soon-to-be profitable enterprise. There are also some proponents who have sought to justify the programme on grounds of collective altruism; they argue that an egalitarian political community has a moral obligation to prevent economic hardship. The legislative histories of virtually all government programmes with explicit redistributional effects will yield a similar welter of justifications. Public pension plans, unemployment compensation, public assistance, no-fault auto insurance and many similar programmes can all be plausibly explained as morally necessary collective responses to the injuries inflicted by more or less deliberate social policies. All of these programmes have also been justified on grounds of charitable duty, and some have been defended with social efficiency arguments.[77]

These examples illustrate the uncertainties that limit the persuasive force of reliance arguments based on legislative precedent. Moreover, the indeterminacy of these reliance claims will usually be heightened by our lack of knowledge regarding the actual distributional effects of many of these complex programmes. There may, however, be limiting cases in which a claimant can point to an established pattern of legislative or administrative decisions granting compensation to individuals in circumstances identical to or very similar to his own. For example, some commentators assert that grandfathering provisions have been so frequently included in legislation modifying or repealing tax incentives that investors have now come to expect them and consequently plan their investments in reliance on that expectation.[78] Our hypothetical cases of regulatory reform raise difficult reliance issues precisely because they do not arise within the context of any clear pattern of compensation precedents.

2. Relative Size of Loss

If our utilitarian legislators are willing to accept the controversial premise that individual preferences for wealth are all roughly equal in intensity and that wealth has diminishing marginal utility, they should conclude that the size of the collectively-imposed loss, in relation to the loser's net worth, will be a good predictor of demoralization. In short, the prospect of relatively

large reductions in net worth is likely to generate more uncertainty cost than an equal risk of small losses, ceteris paribus. There are, however, two substantial problems with a relative size criterion. First, these behavioural premises do not identify any clear threshold which separates wealth reductions that generate large or substantial demoralization costs and those which do not. If one assumes, as seems plausible, that the relationship between wealth reductions and demoralization is pretty much monotonic, any operational formulation of the relative size criterion will require the specification of an essentially arbitrary threshold test, say ten or twenty percent of the loser's net worth. The other major problem with designing a practical relative size test is that within any specific class of losers there is likely to be a rather wide disparity in individual loss experience. Thus, the ownership of any particular polluting factory might be divided between 10,000 small shareholders or centralized in one or two individuals. The employees who are permanently laid-off will experience both a loss of current earnings while unemployed, and a loss in human capital which will be reflected in lower future earings. They may also incur the costs of retraining or relocation or both. Empirical studies of regional labour markets show that the incidence of these different types of losses among unemployed individuals is highly sensitive to individuated factors such as the employee's age, level of skill and skill specialization, sex and geographic location.[79] Young males with few and relatively unspecialized skills generally remain unemployed

for relatively shorter periods, and are usually most successful in securing new jobs comparable to their old ones. Married women, workers in isolated or economically depressed regions, and highly skilled older workers with firm or industry-specific skills usually remain unemployed for longer periods, and encounter the most difficulty in finding comparable employment. Moreover, it is obviously very difficult to form an accurate judgment concerning the distribution of wealth holdings among various classes of employed persons. While they, on average, lose the most from permanent lay-offs, married women are often members of two income households, and highly skilled older workers have, by definition, held relatively well paying jobs for lengthy periods.[80]

The assessment of the relative size of the losses borne by the losers from trucking deregulation will present similar difficulties. Licenses may be held by corporations with widely dispersed share ownership or by sole proprietors. Moreover, it would be virtually impossible to predict the net wealth reductions that will be incurred by individual members of the various classes of investors and employees who benefited from the freight subsidy. The point of these examples is that any utilitarian compensation practice aimed at avoiding large reductions in individual wealth will entail either high settlement costs or a substantial amount of over-and undercompensation.

3. Settlement Costs

Alternative compensation mechanims will generate different real costs of providing any specific level of compensation. Since our utility-maximizing legislators are good marginalists, the choice of any specific level of compensation will in turn be determined by the relative costliness of providing some higher or lower level of compensation. Thus, the legislators will, for example, design a system of partial compensation for cases in which the marginal settlement costs of some form of fuller compensation are greater than the demoralization costs they would avoid. Assume that the legislature has four basic types of compensation mechanisms at its disposal. The first option is a lump-sum payment to losers shortly before or immediately after the regulatory change is implemented. The second alternative is compensation for actual losses incurred by specific losers. Both these methods possess relatively high target efficiency (i.e., generate relatively less over- and undercompensation), but they usually entail high settlement costs. As mentioned earlier, they also create perverse incentives and opportunities for strategic behavior which result in additional indirect social costs.

The third alternative involves some form of temporary delay of, or even permanent exemption from, an anticipated regulatory change. In some regulatory settings, grandfathering or any form of permanent exemption will, of course, be inconsistent with the aim of the reform programme

(i.e., removal of entry controls); the delay remedy usually entails a gradual phasing in of regulatory changes designed to spread capital and operating losses over a period of several years. The costs of delivering compensation through delay will, in any specific case, depend on the length of the period of postponement, the social discount rate and the size of the expected net benefits from the regulatory reform.[81] The fourth alternative is some form of cash or in-kind subsidy that is not directly linked to the actual losses of specific losers. Some examples are income maintenance payments for displaced employees linked to the average manufacturing wage, loan guarantees, capital grants, wage subsidies paid to employers, and income and property tax reductions through a wide variety of credits, deductions and exemptions.

Compensation techniques which employ delay or subsidies not based on actual losses will often have rather poor "horizontal" target efficiency.[82] For example, a compensation scheme utilizing some form of postponement may have very good "vertical" target efficiency (i.e., it will direct compensation to all losers and only to losers), yet it may result in substantial under- or overcompensation of losers, depending on the scheme's particular compensatory objectives. In spite of these target efficiency problems, utilitarian legislators who possessed a reasonable amount of skepticism concerning their ability to accurately assess all the relevant magnitudes of gain and loss might frequently

opt for delay or non-individuated subsidies, given the uncertainty that will surround most claims of demoralization and the relatively greater direct costs of providing lump sums or payments for actual losses.

4. Utilitarian Compensation

Since we possess a substantial degree of skepticism concerning our ability to assess correctly the relative magnitudes of demoralization and settlements costs, the following conclusions on the outcomes likely to be generated by a utilitarian compensation calculus should be regarded as highly speculative.

(a) Factory Owners

With the possible exception of what is likely to be a very small sub-group of individuals with a high proportion of their total wealth invested in polluting factories, the factory owners seem likely to experience rather low demoralization costs. In comparison with the other groups of losers, there was a greater probability that the risk of regulatory change was reflected in the purchase price of their assets. Moreover, there were no special factors which might increase the risk of demoralization such as a pattern of administrative practice which may have induced foreseeable reliance, or some set of background circumstances suggesting that the risk of regulatory change was not voluntarily

assumed. Finally, it seems likely that the legal owners of most factories will be corporations with numerous shareholders, and therefore the number of owners who suffer large reductions in their net worth should be very small.

Since the actual losses that will be incurred as a result of more stringent pollution controls will be dependent on future demand and cost conditions, it would be very difficult and costly to calculate accurate lump-sum compensation at the time the controls are implemented. Problems with establishing causation, the opportunities for strategic behavior aimed at securing undeserved compensation and the disincentives for loss minimization would all seem to militate against any continuing scheme of reimbursement for actual capital and operating losses. Since average demoralization costs should be rather low, it would appear that a utility-maximizing level of compensation might best be attained through some combination of temporary postponement, and direct subsidies or tax reductions linked to the acquisition of pollution control equipment. The legislators might also establish a special procedure for owners who can demonstrate substantial (e.g., 15-20%) reductions in net worth. While the direct and indirect costs of actual loss settlements will be high, losses in excess of a substantial loss threshold are more likely to generate large demoralization costs.

(b) Employees

Employees are more likely to incur relatively higher demoralization costs than entrepreneurs because they are less likely to possess full and accurate information regarding the risk of regulatory change, and their more constrained set of alternatives to risk-bearing increases the probability that their assumption of the risk of change was involuntary. On the other hand, most employees seem unlikely to incur large reductions in their total wealth as a result of permanent lay-off. The classes of employees who generally suffer the most from permanent lay-off, such as highly-skilled workers and married women, also tend to be wealthiest. Older workers with specialized skills and residents of isolated or economically depressed regions would seem to be the most deserving candidates for compensation under a relative size criterion. Yet any method aimed at compensating employees for their actual losses in human capital would require highly speculative forecasts concerning the adverse effect of the lay-off on the lifetime earnings profiles for many different occupational categories. A programme of continuing payments designed to compensate for the lower wages after reemployment would be very costly to administer, and would create perverse incentives for laid-off employees to seek new jobs that were less demanding than those for which they were qualified. These settlement cost considerations suggest that some form of income maintenance subsidy, with both positive and negative incentives designed

to encourage laid off employees to seek reemployment, might be the utility-maximizing settlement option in most cases. The subsidy programmes might also provide grants or low interest loans to finance relocation and retraining for those special categories of employees who are likely to suffer the most from a permanent lay-off. It may also be desirable to provide long-term income maintenance for older employees (i.e., late 50's, early 60's), especially those in isolated or depressed regions, and to secure their future pension entitlements.

(c) Licensees

The factor that makes the licensees' reliance claim stronger than that advanced by the factory owners is the evidence of administrative practices that may have induced reasonable expectations of continuing enjoyment. While many of the licenses may be relatively valuable, the most valuable are likely to be held by corporations with many shareholders, who are therefore unlikely to suffer large wealth reductions. Perhaps the determining consideration here is the practicality of offering lump-sum compensation payments equal to the historical cost or book value of the licenses. While some of the firms may incur operating losses in newly competitive transport service markets, continuing payments for these losses would be costly to provide, and would create disincentives for efficient adjustment to the new market conditions. Gradual phasing in of

entry decontrol might be another possibility, but if the licensees are fully compensated for the book value of their licenses they are unlikely to be very demoralized if a period of postponement is not also provided. Finally, in order to avoid compensating relatively trivial per capita losses, it might be desirable to employ a crude, but cheaply administerable, loss threshold for eligible claims. Thus, for example, an investor claiming compensation might be required to establish that the withdrawal of the firm's license or licenses resulted in a 10% reduction in the book value of his equity investment. On the other hand, if the legislators concluded that the evidence supporting the licensees' reliance claim was fairly convincing, they might decide to dispense with a loss threshold test and simply pay all the firms a lump sum equal to the book value of their licenses.

(d) Beneficiaries of Freight Subsidy

It is obviously speculative to make generalizations about the expectations of the many groups of rural residents who were directly or indirectly dependent on the freight subsidy. The direct beneficiaries, the commercial shippers, might be able to advance a reliance claim on the basis of administrative practice. While the hypothetical situation dealt with here does not incorporate any special facts which might lend support to such an argument, it is likely that the implicit nature of the freight subsidy would, in many plausible factual settings, undermine the credibility of such a claim.

Nevertheless, it will be argued that because of their isolated location and lack of alternative means of transport, many of the losers in these various groups of former direct and indirect beneficiaries (i.e., the shippers, local employees, merchants, landowners) will suffer substantial losses. Yet it would be very costly and difficult to accurately forecast the size and distribution of the losses, or to measure them after they have occured. The utility-maximizing compensation option in this case is likely to be a continuation of the subsidy. Since losses will be very speculative and transport technology changes fairly rapidly, the subsidy might be wthdrawn in stages over a lengthy period (i.e., 10 years) to smooth out the process of adjustment; the right to provide the subsidized service should be assigned through competitive negative bidding.[83]

(c) Kantian Compensation

The utilitarian analysis of compensation for losses imposed by efficiency-enhancing policy changes proceeds on the ethical premise that value, however determined, should be maximized in aggregate by whatever distribution best serves this end. Our simplified utilitarian calculus, which assumes roughly identical preferences for wealth and implicitly converts all forms of satisfaction into monetary units, avoids the more dramatic cases of "predatory" utilitarianism, instances in which large losses for many are justified because a few realize huge welfare gains. Even when softened in

this way, the utilitarian ethic bars compensation when both settlement costs and utility gains exceed the demoralization costs imposed on the losers from regulatory change. The general problem we wish to address briefly in this concluding part of the paper is how certain modern versions of Kantian theory might be employed to supplement or round out our ethical intuitions concerning fair treatment for the victims of regulatory change. Is the utilitarian compensation practice ethically incomplete in the sense that it generates certain outcomes which seem to offend against widely-held notions of fairness? Suppose that an efficiency-promoting policy change will inflict large losses on some particularly under-privileged or disadvantaged group, but that very high settlement costs rule out compensation on utilitarian grounds. Kantian ethical theory seems responsive to our concerns because it provides systematic support for the idea that the citizens of a political community, which subscribes to individualistic and egalitarian moral principles, possess rights to fair treatment which constrain the collective pursuit of efficiency. Thus, Kantian theory, animated by the ideals of human autonomy and moral equality, focuses on the question of distribution or social allocation as an end or outcome which requires independent ethical justification, and not as merely a means to the maximization of total welfare.

1. The Difference Principle

If social and political life is a cooperative endeavor, an enterprise which imposes both benefits and burdens on all participants, how should the social product be allocated among morally equal individuals? The Kantian response to the problem of distributive justice proceeds from the notion of voluntary consent. Each citizen's right to equal concern and respect is safeguarded when all the individuals who might be disadvantaged by some political or economic arrangement give their voluntary consent to its adoption. Under what conditions might rational, self-interested individuals agree to bear the burdens which inevitably attach to membership in a political community? For John Rawls, as for his predecessors Locke, Rousseau and Kant, the answer to this question can be found in the doctrine of a hypothetical social contract.[84] In Rawls' political theory the social contract serves as an allegorical form of argument for testing the fairness of social arrangements which determine the allocation of benefits and burdens.

If it can be demonstrated that any individual would agree that a certain rule of social allocation was best among the rules which would be agreeable to all other members of the community, under otherwise fair conditions, then all the parties would also agree that that individual would be morally bound to accept the consequences in a particular case of the rule's application. This is the core

of the fairness argument that animates all social contract theory.

The background conditions which shape the contracting process will, of course, have a determinative effect on the fairness of the substantive principle or principles which are unanimously chosen by the parties. It is crucial that all parties who are to be bound under the contract receive effective representation in the hypothetical process, and that no subset of interests be permitted to promote its particular interests at the expense of those of the community at large. Rawls' theory employs two devices designed to ensure the fairness of the process. First, Rawls checks the promotion of particular rather than general interests by requiring unanimous agreement; if the parties fail to reach agreement on a fair principle of social allocation, a rule of strict equality will be imposed. Rawls asserts that an equal distribution of welfare is prima facie just and requires no special justification by reference to the contract argument. Second, Rawls imposes a "veil of ignorance" which denies the parties the knowledge necessary for the promotion of particular interests. The parties are deprived of knowledge of their own social and economic positions, their own special interest in the society and even their own talents and abilities (or lack of them). The "veil of ignorance" transforms each of the parties into a representative for the interests of all the others. This is because any particular party may turn out to be in a position like any of the others, so he or

she must prefer a principle of justice which takes into account all possible social positions. Thus, Rawls argues that the institutions of a society are just to the extent that they are organized according to the principles that would have been accepted by all rational persons under the veil of ignorance.

Subject to the constraints of ignorance and uncertainty, what principles of justice would be unanimously chosen to provide a yardstick for the evaluation of all social arrangements? Rawls argues that the parties would choose a concept of justice based on what he calls the difference principle, which evaluates possible institutional forms in terms of the interests of the least advantaged or worst-off member of the community.[85] Since no one knows what his or her own personal situation might be under any specific institutional arrangement, each must consider the possibility that they might end up as the worst-off individual in the community. Rawls asserts that the parties would choose a rule of distribution which permitted inequalities only if that rule provided a guarantee that all would be better off than under a rule requiring strict equality in distribution. They would only be certain of doing better if the worst-off under the unequal arrangement received better treatment than everyone under the equal one. Thus, whether or not there are inequalities, Rawls argues that the parties would contract for a principle of social allocation that would maximize the minimum position in their community.

The behavioural assumptions which Rawls employs to derive his maximin principle of distributive justice are perhaps the most controversial features of his ethical theory. John Harsanyi, among others, argues that the maximin principle would only be chosen by parties who shared an unrealistically high aversion to risk.[86] This is because the difference principle requires each party to evaluate any particular institutional framework as if he were completely certain that he would occupy the least favoured position under it. Harsanyi asserts that it would be irrational for any person to make her future behaviour wholly dependent on some highly unlikely adverse contingency regardless of how little probability she was willing to assign to it. Under the conditions of uncertainty posited by Rawls, he argues that the parties would assign an equal probability to occupying all the possible positions that might eventuate under any specific principle of distribution. Based on this assumption, he concludes that the parties would choose a principle of distribution that would require the maximization of the average level of utility or welfare within the community.[87] Thus, Rawls' difference principle stands as a viable Kantian alternative to utilitarianism only if one is willing to accept his argument that the contracting parties would adopt a maximin decision rule over some alternative, such as expected average utility maximization.

Suppose that our Kantian legislature decides to adopt the difference principle to evaluate the fairness of

its society's institutions. Would the legislators, under the principle of maximin justice, be required to implement a compensation policy aimed specifically at the least advantaged victims of regulatory change? Rawls' theory would not require the legislature to pursue maximin justice in this specific way. In fact, Rawls has emphasized the point that the difference principle permits a wide range of alternative methods for achieving a fair division of welfare. Rawls draws a distinction between what he calls the "basic structure" of society and the "rules which apply directly to individuals and associations and are to be followed by them in particular transactions".[88] He argues that the difference principle must dictate the design of only those institutions that comprise the community's basic structure. Rawls states that: "The difference principle holds, for example, for income and property taxation, for fiscal and economic policy. It applies to the announced system of public law and statutes and not to particular transactions and distributions, nor to the decisions of individuals and associations, but rather to the institutional background against which these transactions and decisions take place. The objection that the difference principle enjoins continuous corrections of particular distributions and capricious interference with private transactions is based on a misunderstanding".[89] Thus, it seems clear that after fair background institutions are in place, Rawls' theory would permit many issues of institutional design to be resolved on technical efficiency grounds. For example, Rawls argues for a proportional expenditure tax,

rather than a progressive income tax, to finance public expenditures on the ground that proportional taxes are more likely to maximize aggregate welfare.[90] Why should our Kantian legislature pursue maximin justice through explicit compensation for the losers from regulatory change when its distributive objectives might be more efficiently secured through a comprehensive scheme of taxes and subsidies? In light of the high direct and indirect costs of most explicit compensation arrangements, it seems likely that some more cheaply administerable and neutral system of transfer payments would be the Kantian's preferred instrument of redistribution. There may, however, be exceptional cases in which one of society's least advantaged groups happens to be heavily represented among the losers from a particular regulatory change, and the settlement costs of providing compensation are relatively low. For example, if a significant number of the common carrier licensees in our deregulation hypothetical happened also to be members of society's poorest stratum, it is at least conceivable that it might be cheaper to pay them the book value of their licenses rather than make the offsetting transfers through some general scheme of public assistance. There is, however, little reason to expect that the least advantaged will be disproportionately represented among the groups of investors and employees who stand to lose from more stringent environmental controls and trucking deregulation. Barring exceptional cases, the Kantian legislature would eschew explicit compensation for the victims of specific changes and pursue its distributional

objectives through more cost efficient instruments. Rawls has explicitly acknowledged the indeterminancy of his Kantian theory of justice when applied to specific institutional arrangements. His defence is that "[o]ften the best that we can say of a law or policy is that it is at least not clearly unjust".[91]

VII Conclusion

The thrust of our analysis of the case for an expansive, explicit compensation principle has, in many respects, been rather nihilistic. Our analysis of the three grounds on which Tullock advocates such a principle leads, in each case, to a more qualified position on the merits of compensation.

With respect to compensation and political pragmatism, we sought to show that the recipients of explicit compensation might not, on that account, be rendered indifferent to regulatory change, if the compensation arrangements impose substantial costs of uncertainty on them. On the other hand, on-going compensation payments, designed to underwrite actual losses, are likely to increase substantially the amount of compensation involved. The payers of compensation - presumably the gainers from the regulatory change -may well cease to be a strong political constituency for the change if the compensation arrangements substantially attenuate the net benefits from the reform. Politicians, in deciding whether to support the payment of explict compensation to the losers from regulatory change, will find it rational to ask whether such an expenditure of resources at their disposal anywhere else across the entire political landscape is likely to yield higher political returns. In very few cases, we suggest, will explicit compensation be a rational policy for politicians to pursue. Experience appears to bear out this hypothesis.

With respect to compensation and economic efficiency we sought to show that an obligation on governments to pay compensation to losers from regulatory change would not provide an effective guarantee that only welfare maximizing moves would be undertaken. Similarly, the argument that a compensation principle reduces the social costs of uncertainty was found to be unconvincing in the absence of some concept of a social risk optimum; moreover, there is little convincing evidence that the risks associated with changes in government policy have any special impact on economic activity compared to a host of other risks that economic agents commonly assume. The one context in which a case can be made for a form of compensation on efficiency grounds would seem to be with respect to certain kinds of adjustment assistance. Here it may be argued that imperfections in labour and capital markets inhibit employees whose human capital has been depreciated by regulatory change from making optimal relocation, re-training and re-employment decisions. Government job placement and retraining programmes may be responsive to these market imperfections. However, it should be noted that such programmes do not take the form of direct explicit compensation for losses incurred and are confined to a narrow subset of potential losers from regulatory change.

Efficiency-based arguments against a compensation principle seems, in general, little more convincing than the affirmative arguments. The argument that a compensation principle would encourage rent seeking activities ignores

the fact that it would also discourage rent protection activities. The argument that compensation of losers from regulatory change would be tantamount to compensating for pecuniary externalities seems to assume that the welfare implications of the workings of private and political markets are identical; the potential for majoritarian coercion in political markets undermines any assumption that outcomes are necessarily welfare maximizing, as may be assumed in properly functioning private markets. On the other hand, the argument that a compensation principle would often generate transaction costs in tracing and measuring losses far in excess of the actual losses involved (and would on this account be inefficient) seems to have substantial force.

Even if a case could be made out for a compensation obligation (presumably in constitutional form) on efficiency grounds, it would seem difficult to justify confining its sphere of application to losses from regulatory changes in the light of the ability of governments to substitute for regulatory instruments other instruments for intervention e.g. tax, expenditure and public ownership instruments, perhaps generating even greater dead-weight social losses.[92] However, extending a compensation obligation (presumably by way of a general constitutional constraint) to all forms of government intervention would deny a major redistributive role to government. Given that this seems now recognized, even by economists, to be perhaps the most pervasive role played by modern government, such an extension would radically transform the very

nature of democratic government.[93] Such a radical constraint on the role of government, in the name of efficiency, would require much more searching scrutiny than debates over compensation of losers from regulatory change have commonly countenanced. Yet this fundamental issue cannot ultimately be avoided.

Utilitarian moral theory would support programmes of explicit compensation for only a relatively small number of potential losers. Detrimental reliance arguments for compensation of investors and employees often gloss over the countervailing long-run consequences of loss shifting and spreading in economic markets and vote trading in political markets. Since claims based on reliance tend to be resistant to external assessment, the most that can be said of virtually all these claims is whether or not the claimants' story possesses a minimum amount of plausibility. Denial of compensation for reasonably plausible reliance claims runs a substantial risk of citizen disaffection. Utilitarian compensation rules would also be responsive to the costs of uncertainty generated by the risk of very large wealth losses; losers from regulatory change who suffer substantial reductions in net worth would be preferred candidates for explicit compensation on utilitarian grounds. Utilitarian concern for promoting security of expectations and protecting the risk averse from large magnitudes of risk is, however, tempered by an equal concern for settlement costs. Since implicit forms of compensation usually entail direct and

indirect costs of settlement which are lower than those generated by explicit mechanisms, utilitarian legislators will usually choose some policy of delay or general subsidies to reduce demoralization costs.

Social contract theory provides no clear support for a compensation practice any more extensive than one designed in accord with utilitarian principles. Rawls' Kantian theory would seem to require explicit compensation for losses due to efficiency-promoting regulatory changes only when an explicit award of compensation is the most efficient method for ensuring a fair distribution of wealth. The efficiency condition for Kantian compensation will rarely be satisfied.

Footnotes

1. See Robert Dorfman, Agenda for Research on the Transitional Effects of Regulation, Report of Conference, Washington, D.C.: June 1978, p. 2.

2. Ibid, at p. 3.

3. For an analysis of how the length of the adjustment periods confronting various investor and employee groups will affect the relative size of their transitional losses, see Jean-Luc Migue, Nationalistic Policies in Canada: An Economic Approach (Montreal: C.D. Howe Institute, 1979).

4. Dorfman, note 1 supra, at p. 11.

5. "Achieving Deregulation - A Public Choice Perspective", Regulation Nov./Dec., 1978.

6. Ibid, at p. 54.

7. For a review of the literature, see Brian Kantor, "Rational Expectations and Economic Thought", 17 J. Ec. Lit. 1422 (1979); for a simple statement of the rational expectations hypothesis see Steven Sheffrin, "Rational Expectations and Economic Models", Working Paper Series, 121; March 1979, Department of Economics, University of California at Davis.

8. Kantor, ibid, at p. 1425.

9. For an elementary treatment of these questions see Thomas Pogue and L.G. Sgontz, Government and Economic Choice (Houghton Mifflin, 1978), Part Four.

10. See generally James Buchanan and Gordon Tullock, The Calculus of Consent (University of Michigan Press, (1962); Dennis Mueller, Public Choice (Cambridge University Press, 1979), pp. 49-58.

11. The concept of "comprehensive net worth" in terms of measuring the impact of government policies on citizens is developed by Douglas Hartle, Public Policy Decision-Making and Regulation (Institute for Research on Public Policy, 1979), Chap. 2.

12. James Buchanan, "Individual Choice in Voting and the Market", 62 J.Pol.Econ. 334 (1954).

13. Anthony Downs, An Economic Theory of Democracy (Harper & Row, 1957) p. 225.

14. See Hartle, "The Need for Adjustment and The Search for Security: The Barriers to Change" in Developments

Abroad and the Domestic Economy (Ontario Economic Council, June, 1980, pp. 49-113.

15. Canadian UI Act 8 [UIC].

16. See Joseph Cordes and Burton Weisbrod, "Compensating Losers from Economic Change When Lump-Sum Transfers are not Possible", Discussion Paper No. 608-80, Institute for Research on Poverty, University of Wisconsin-Madison (May, 1980).

17. John Palmer, Municipal Cartage and Taxi Regulation (Ontario Economic Council, 1981) (forthcoming).

18. See Michael Trebilcock and Douglas Hartle, "The Choice of Governing Instrument", Workshop Paper III-1, Law and Economics Workshop Series, University of Toronto, 1980.

19. See, e.g., James Bordach (ed), Policy Termination (North Holland, 1979)

20. See Joseph Cordes and Burton Weisbrod, "Government Behavior in Response to Compensation Requirements, 27 J.Pub.Ec. 47 (1979).

21. James Buchanan, "Positive Economics, Welfare Economics, and Political Economy", (1959) 2 J.L.E. 124 at 125.

22. See Buchanan, ibid, p. 129.

23. Frank Michelman, "Property, Utility and Fairness: Comments on the Ethical Foundations of 'Just' Compensation Law", (1967) 80 Harv. L.R. 1165 ap p. 1173, 1174.

24. Jack Knetsch and Tom Borcherding, "Expropriation of Private Property and the Basis for Compensation" (1979), 29 U.T.L.J. 237.

25. William Niskanen, Bureaucracy and Representative Government (Aldine, 1971).

26. Edmund Kitch, "Can We Buy Our Way Out of Harmful Regulation", in Donald L. Martin and Warren F. Schwartz, (ed), Deregulating American Industry (Lexington Books, 1977) at 53, 54.

27. Anthony Downs, "Uncompensated Nonconstruction Cost Which Urban Highways and Urban Renewal Impose Upon Residential Households in J. Margolis (ed) The Analysis of Public Output, (NBER, 1970) at 72-73.

28. Robert Goldfarb, "Compensating Victims of Policy Change" Regulation Sept./Oct., 1980, at 22.

29. Michelman, note 23, supra, at p. 1214.

30. Economic Analysis of Law (Little, Brown & Co., 1977, 2d ed) at 41, note 1.

31. Kitch, note 26, supra, at p. 52.

32. Ibid, p. 52.

33. Jack Knetsch and E. Weinrib, Expropriation and Other Takings, (Butterworths, forthcoming 1981).

34. Ronald Coase, "The Problem of Social Cost", (1960) 3 J. Law and Econ. 1.

35. See, e.g., "The Chrysler Package", Regulation, July/Aug., 1980, at p. 6; see also Roy Matthews, Industrial Viability in a Free Trade Economy (Univ. of Tor., 1971) at pp. 11-12.

36. See Dorfman, note 1, supra, at pp. 13-15.

37. See generally, Morley Gunderson, Labour Market Economics, (McGraw-Hill Ryerson, 1980) at pp. 103-05.

38. Ibid, at p. 104.

39. Ibid, at chap. 16.

40. See, e.g., H. Edward English, "Trade Liberalization and National Adjustment Policy-The Canadian Case" in Kiyoshi Kojima (ed.), Structural Adjustments in Asian-Pacific Trade (Japan Econ. Research Center, Tokyo, 1973) at p. 420.

41. Trade Act of 1974, 19 U.S.C. SS 2291-98 (Supp. V. 1978).

42. These studies, conducted under contract for the U.S. Department of Labor, are summarized in Charles Pearson, "Trade and Structural Adjustment Policies", School of Advanced International Studies, Johns Hopkins University, draft, May 1980, at pp. 19-44 (forthcoming from UNCTAD).

43. Ibid, at pp. 29-44.

44. Ibid.

45. See, Marvin Feldstein, "The Effect of Unemployment Insurance on Temporary Lay-off Employment", 68 Am.Econ.Rev. pp. 834-46 (1978).

46. Michelman, note 23, supra.

47. In a moral community with a fixed number of members, both total and average utility maximization would require the same actions or institutional arrangements. Bruce Chapman, among others, has pointed out that "... the advantage of average utility maximization [in a world of variable populations] is that it would not recommend a world with high total utility distributed across a great number of individuals none of whom were very happy, since high total utility divided by a high number of affected individuals may make for quite low utility on average." Bruce Chapman, Coase, Cost and Causation, Paper #WS11-15, Law and Economics Workshop, Faculty of Law, University of Toronto, 1980.

48. J. Smart and B. Williams, Utilitarianism, For and Against (Oxford, 1973) at pp. 108-18; for a good review of the literature, see De Brock, Recent Work in Utilitarianism (1973), 10 Am. Phil. Q. 241.

49. See, e.g., John Rawls, A Theory of Justice (Harvard, 1971), at pp. 22-27; Robert Nozick, Anarchy, State and Utopia (Basic Books, 1974) at pp. 57-87.

50. John Stuart Mill coined the utilitarian maxim that "... everybody [is] to count for one, nobody for more than one." See, J.S. Mill, Utilitarianism (Ch.5) in 10 Collected Works of John Stuart Mill (Oxford, 1969) at p. 157.

51. John Rawls calls this process of mutual adjustment of principles and considered judgments a process of "reflective equilibrium". Rawls, note 34, supra, pp. 19-21.

52. For a thoughtful analysis of the problems involved in operationalizing moral principles, see Philip Soper, "On the Relevance of Philosophy to Law: Reflection on Ackerman's Private Property and the Constitution" (1979) 79 Colum. L. Rev. 44.

53. Robert Nozick, Anarchy, State and Utopia (Basic, 1974). For a trenchant critique of Nozick's theory of the state, see H.L.A. Hart, "Between Utility and Rights" (1979), 79 Colum.L.Rev. 829, at pp. 831-35.

54. See, e.g., James Buchanan and Gordon Tullock, The Calculus of Consent (Univ. of Mich., 1962).

55. The legislators and their constituents are described as "well-socialized" because they all accept the basic ethical premises of utilitarianism; they may however disagree on instrumental issues concerning the most appropriate policies for securing utilitarian justice.

56. For a recent review of these cases see, Donald Wittman, First Come, First Served: An Economic Analysis of "Coming to the Nuisance" (1980), 9 J. Leg. Stud. 557.

57. The facts in this hypothetical are based on the Ontario scheme for regulation of intra and inter-provincial "for-hire" trucking. See, e.g. Norman Bonsor, "The Development of Regulation in the Highway Trucking Industry in Ontario" in Ontario Economic Council, Government Regulation (O.E.C., 1978) at p. 103.

58. This is Michelman's formulation, see, note 23, supra, at pp. 1214-16.

59. Bruce Ackerman, Private Property and the Constitution (Yale Univ., 1977) at 46-7.

60. Ibid, at pp. 47-49.

61. See, e.g., David Hume, A Treatise of Human Nature, Bk. III, (Dolphin Paperback ed., 1961) at pp. 436-42.

62. Cordes and Weisbrod, note 16, supra, at pp. 17-27.

63. Standing alone, the argument from reliance is incomplete as an ethical justification for a right to compensation. Ackerman notes that the reliance argument, in its strongest formulation, "shields the status quo from normal legislative change without anyone asking whether existing socially based expectations make some larger normative sense." Ackerman, note 59 supra, at pp. 104-05.

64. For a useful review see Mark Willes, "Rational Expectations as a Counterrevolution" in Irving Kristol (ed), The Crisis in Economic Theory, Public Interest (Special Issue, 1980) at p. 81.

65. Richard Posner, The Value of Wealth: A Comment on Dworkin and Kronman (1980) 9 J. Leg. Stud. 243, at 250-52.

66. See, e.g., Richard Zeckhauser and Albert Nichols, "The Occupational Safety and Health Administration", in Appendix A, Vol. 6, U.S. Senate Comm. on Governmental Affairs, Study of Federal Regulation: Framework for Regulation (GPO, 1978) at p. 12-18.

67. There is evidence that the labor market does take some account of differences in occupational risk. Smith found that injury-rate differences across manufacturing industries appear to be related to factors which proxy for the likelihood of accidents (i.e., employee turnover, accident costs borne by employers, etc.) as measured by risk-related wage differences. Robert Smith, The Occupational Safety and Health Administration: Its

Goals and Achievements, (Amer. Enterp. Inst., 1976), at pp. 19-26.

68. See, e.g., Richard Epstein, "Nuisance Law: Corrective Justice and Its Utilitarian Constraints" (1980), 8 J. Leg. Stud. 49, 50-54; Philip Soper, "The Constitutional Framework of Environmental Law" in E. Dolgin and T. Guilbert, (ed.), Federal Environmental Law (Little, Brown, 1974) at pp. 65-66.

69. See, e.g., London, Brighton & South Coast Ry. Co. v. Truman (1885), 11 App. Cas. 45 (H.L.). Early common law resolved conflicts between incompatible uses by giving priority to the party who was there first. William Blackstone, Commentaries on the Laws of England, Vol. 2, (17th ed., 19830) at pp. 402-03.

70. See, e.g., Roncarelli v. Duplessis, [1959] S.C.R. 121 at pp. 137-4, and pp. 161-69.

71. Common law doctrines may, of course, play a role in shaping expectations. The courts recognize the existence of a compensable "taking of property" only in those cases in which the state appropriates or uses some tangible or intangible thing. See, e.g., France Fenwick & Co. v. The King, [1927] 1 K.B. 458. Thus, for example, the down-zoning of vacant land from a "commercial" to a "residential" designation has been held not to be a taking of property, in spite of the fact that the owner suffered a very large economic loss. Belfast Corp. v. O.D. Cars Ltd., [1960] A.C. 490 (H.L.)

72. See, Thomas Scanlon, Nozick on Rights, Liberty and Property (1976), 6 Phil. Pub. Affs. 3, at pp. 13-14.

73. See, e.g., A.M. Ross, Employment Policy and the Labour Market (Berkeley: Univ. of Calif., 1965) Chap. 2.

74. See, e.g., William Riker, The Theory of Political Coalitions (Random, 1962); Mancur Olson, The Logic of Collective Action (Harvard, 1965).

75. The goal of impartial and consistent administration of legal systems is often referred to as the objective of "formal justice"; formal justice requires that the laws apply equally to those belonging to the classes defined by them. See, Charles Perelman, The Idea of Justice and the Problem of Argument (Routledge and Kegan Paul, 1963) at p. 41.

76. See, e.g., "The Chrysler Package", Regulation, July/Aug. 1980, at pp. 3-6.

77. See, e.g., Harold Hockman, "Rule Change and Transitional Equity" in H. Hockman and G. Peterson (eds.), Redistribution Through Public Choice (N.Y. Univ. 1976) 320, at pp. 333-38.

78. See, e.g., Michael Graetz, "Legal Transitions: The Case of Retroactivity in Income Tax Revision" (1977), 126 Va. L. Rev. 47, at pp. 74-79.

79. See, e.g., Glenn Jenkins, et. al., Trade Adjustment Assistance: The Costs of Adjustment and Policy Proposals (Supply and Services Contract 93/810-936-3) Report to Department of Industry, Trade and Commerce (mimeo, 1978) at pp. 40-61.

80. Id. at pp. 58-61.

81. See, e.g., Cordes and Weisbrod, note 16, supra, at pp. 14-21.

82. See, Burton Weisbrod, "Income Redistribution Effects and Benefit-Cost Analysis" in Samuel Chase (ed.) Problems in Public Expenditure Analysis (Brookings, 1968) at pp. 177-209.

83. See, The Airline Deregulation Act of 1978, Pub. L. No. 95-504, 92 Stat. 1705, 1732-40 (1978). Under section 19 of the Act, all exit restrictions on licensed air carriers are removed, except those necessary to protect "essential air service". Section 33 guarantees "essential" levels of service to small communities; this subsidy programme has a 10 year maximum lifespan.

84. See, Rawls, note 49, supra, at pp. 3-22, for a useful introduction to social contract theory.

85. Id. at pp. 60-83.

86. John Harsanyi, "Can the Maximim Principle Serve as a Basis for Morality? A Critique of John Rawls' Theory" (1975), 69 Amer. Pol. Sci. Rev., at pp. 594-606. See also, Kenneth Arrow, "Some Ordinalist-Utilitarian Notes on Rawls' Theory of Justice" (1973) 70 J. Phil. at pp. 245-63.

87. See, Mitchell Polinsky, "Probabilistic Compensation Criteria (1972), 86 Q.J. Econ. 407.

88. John Rawls, "The Basic Structure as Subject" in Allan Gobman & James Kim (ed.s) Values and Morals (Univ. of Michigan, 1978) at p. 55.

89. Id. at p. 65.

90. Rawls, note 49, supra, at p. 279.

91. Id. at p. 199.

92. See Michael Trebilcock, et. al. The Choice of Governing Instrument, Economic Council of Canada, Regulation Reference, 1980.

93. See, e.g., Sam Peltzman, "Towards a More General Theory of Regulation" (1976), 19 J.L.E. 211.