MIRROR, MIRROR ON THE WALL
WHO IS THE FAIREST OF THEM ALL

or

why so many public policies designed to tackle environmental problems have failed so far

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12.1 INTRODUCTION

A decade ago Charles Wolf Jr. published his well known article on non-market failures in which he presented a mirror to the government (Wolf, 1979). The article evoked a number of reactions (Peacock, 1980; Musgrave, 1981; Recktenwald, 1984), but these can be qualified as fine tuning rather than as a totally different opinion. In this chapter we will concentrate on one side of the coin, the non-market failures, which offer a possible answer to the question of why the efforts of the government to solve environmental problems, which - at least until recently - were dominated by regulations, have not so far met the high (maybe too high) pitched expectations. We shall argue that the ineffectiveness is due to the distributional inequity of present policies.

The structure of this chapter is as follows. A framework for the analysis of the consequences of government intervention is presented in Section 2. Following Wolf, we will distinguish four non-market failures of which distributial inequity seems to be especially important in the sphere of environmental policies. In Section 3 we will argue that the acceptance of Pareto-superior adjustments of environmental policies is not only a matter of design, but also of implementation and, more specifically, organization. In our view, a political entrepreneur is needed to counterbalance the very well organized opponents of adjustments to present environmental policies. The introduction of a political entrepreneur is the subject of Section 4. We conclude with a plea against ecototalitarianism. Indeed, we shall provide reasons to believe that only eco-democracy can offer effective remedies for market and non-market failures in environmental affairs.
12.2 A FRAMEWORK FOR THE ANALYSIS OF GOVERNMENT INTERVENTION

In analogy to the economic theory of market failure, Wolf draws a distinction between four categories of non-market or government failure, providing as many hypotheses for the analysis of environmental policy. The hard core of his argument is that the implications of non-market failure might be worse than those of market failure.¹ As a result, counter measures are needed against the counter measures against market failures; i.e. counter-counter measures (Wolf, 1979, p. 156). In other words, the question is not whether the budget mechanism is associated with exceptional costs, but whether these costs exceed the costs linked to the market mechanism. A thorough comparison of the costs and benefits of both mechanisms is needed in order to decide whether the provision of specific goods or services has to take place in the public or the private sector.² After all, it is a choice between imperfect alternatives.

The government failures, which result from the specific characteristics of non-market demand and supply, regardless of the equilibrium point of public demand and supply (Wolf, 1988, p. 62), can be summarized as follows:

1. The disjunction between revenues and costs of non-market production resulting in redundant costs. The possible gains from change are uncertain, while the costs of the maintenance of the status quo are low. For that reason, opportunities for the minimization of the costs or maximization of the productivity, as well as for economies of scale, are ignored with redundant costs - X-inefficiency (Leibenstein, 1966) - as a result. Moreover, these redundant costs increase over time.

2. The development of internal standards (internalities) and organizational goals. The non-market agencies, lacking the direct performance indicators of the market - consumer behavior, market shares and the profit-and-loss bottom line - have to set their own standards. These standards - or internalities - are the goals that apply within non-market organizations to guide, regulate, and evaluate agency performance and the performance of agency personnel. They boost agency supply curves

¹ Note that the term 'failure' is not used in the traditional restricted sense of the word and that 'market failure' is not the same as 'market imperfection'.

² See Hans van den Doel who argues that comparison of the reality (and not of the ideals) of the public and the private sectors of industry inevitably leads to the conclusion that the two sectors produce under circumstances of unequal power and imperfect competition, so that neither fully makes use of the possibility of meeting the consumers' preferences. In other words: the reality of both market and non-market mechanisms produces benefits as well as costs. The choice between these mechanisms can only be made on the basis of a full comparison of the marginal costs and benefits of both (Van den Doel, 1979, p. 153).
above technically feasible ones, resulting in a higher input and/or lower output than the socially desirable (Niskanen, 1971; Breton/Wintrobe, 1982). In that respect, internalities are the inverse of the externalities associated with the market. The existence of externalities means that some social costs and benefits are not included, while the existence of internalities means that some organizational costs and benefits are not excluded.  

3. The existence of derived externalities is one of the reasons for the intervention of non-market organizations in the market. However, the intervention of these agencies will also generate unanticipated side effects. These side effects of the non-market are often overlooked because of the short time horizon and high time discounts of political actors. Derived externalities in the non-market domain are side effects of which the agency creating them is not aware and hence do not affect the agency’s calculations or behaviour. The likelihood of derived externalities is further enhanced by both demand and supply characteristics associated with non-market output (see category 1).  

4. The efforts of the government to compensate for distributional inequities as a result of the market may result in other distributional inequities in income and wealth, as well as in influence and power. It places discretionally authority in the hands groups of individuals and, therefore, provides opportunities for abuse, with distributional inequity as a result.  

A comparison of the four categories of non-market failure with the well-known market failures is made in figure 1.

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3 Wolf distinguishes three types of such internalities. First, the organizational goal of budget growth (more is better). Second, the desire for technological advance (new and complex is better). Third, information acquisition and control (knowing what others don’t know is better).  

4 Liberals are likely to see a greater externality in the regulation to prevent an externality than in the prevented externality itself (Riker/Ordeshook, 1973, p. 293).
Figure 1 Categories of market failure and non-market failure

<table>
<thead>
<tr>
<th>market failure</th>
<th>non-market failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>increasing returns</td>
<td>redundant and rising costs</td>
</tr>
<tr>
<td>externalities and public goods</td>
<td>internalities and organizational goals</td>
</tr>
<tr>
<td>market imperfections</td>
<td>derived externalities</td>
</tr>
<tr>
<td>distributional inequity in income and wealth</td>
<td>distributional inequity in power and privilege</td>
</tr>
</tbody>
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According to Wolf, the internalities are as important for the theory of non-market failure as the externalities are for the theory of market failure (Wolf, 1979, p. 117). We do not challenge the importance of the internal standards and organizational goals, but in our view inequity is more relevant for the explanation of the lack of success of environmental policies or, to say it differently, the failure of the government to cope with environmental problems is not so much a matter of allocation as a matter of distribution. It seems to us that this lack of success is particularly due to the fact that the benefits of environmental protection to relatively large groups of the population are not adequately accounted for in the policy making process.

12.3 ENTREPRENEURIAL POLICIES

A question of distribution?
The theory of non-market failure is elaborated by James Q. Wilson, who has claimed that a policy, especially one involving economic stakes, can be classified in terms of costs and benefits. The consequences, i.e. the costs and benefits of a policy, may be monetary or non-monetary and the value assigned to it as well as the beliefs about the likelihood of its materializing can change. He has argued that not only the magnitude - politics is replete with discussions of 'windfall profits', 'tax burdens' and 'unmet needs' - but also the distribution of the costs and benefits matter. The costs and benefits
may be widely dispersed or narrowly concentrated (Wilson, 1973, 1980). The subsidies to a particular industry or the regulations imposing the costs on an industry that cannot be fully passed on to the consumers are, for instance, narrowly concentrated, whereas income and social security taxes are widely dispersed. Moreover, perceptions of the fairness and unfairness of a policy profoundly affect the extent to which it is regarded as legitimate and, therefore, justified.

The different implications of government intervention can be combined into a matrix as presented in Figure 2. It should be emphasized, though, that this is a stylized scheme and that there are many intermediate cases:

Figure 2 Four types of public policies

<table>
<thead>
<tr>
<th>costs</th>
<th>benefits</th>
<th>concentrated</th>
<th>distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>concentrated</td>
<td>interest policies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>distributed</td>
<td>client policies</td>
</tr>
</tbody>
</table>

In the case of environmental policies we have to do with widely dispersed benefits and narrowly concentrated costs. In that situation a political entrepreneur is needed to organize the beneficiaries. A policy characterized by a narrow concentration of costs and an even distribution of benefits - such as taxes and regulations that make the polluter pay\(^5\) - will not be accepted unless those who benefit are organized in a comparable way to those who pay the price. However, the incentive for the beneficiaries to organize is weak, as is shown by Mancur Olson Jr., who has puzzled over the paradox that individually rational behavior may lead to collectively irrational results (Barry/Hardin, 1982).

\(^5\) The theory of interest groups can be applied to the policy already implemented, as well as to the policy planned for the nearly future. The philosophy behind both is the same: the polluter has to pay, but the costs may be distributed differently.
A question of organization?
The interest of the theory of collective action, which has been developed by Mancur Olson Jr. (Olson, 1965), consists in the conditions under which a group, being a number of individuals with a common interest, will succeed in providing a collective good to its members. He concludes that a rational, self-interested individual will not act to achieve a common interest, unless membership is quite small or an incentive is offered to make individuals act in their common interest. The individual optimum may conflict with the collective optimum of the group, because there is no 'invisible hand' to match between both optima in a large group. On the contrary, in a large group the problem of the 'malevolent back of the invisible hand' comes up (Hardin, 1982, p. 7).

A rational individual in a large group can make two assumptions, both leading to apathy. The first is called positive apathy, i.e. the belief that it does not matter whether he will participate or not, because the collective good will be provided anyway and he cannot be excluded. In this case an individual has no incentive to participate. In fact, it is to his advantage to remain aloof. The second is called negative apathy, i.e. the belief that it is not worthwhile participating because the collective good will not be provided anyway. As a result, he will bear only the costs and receive no benefits from his participation.7

The problem is that participation in a large group will have only a small impact, if any, upon the production of the collective good, whereas participation in a small group will be decisive. In a large group participation or non-participation will make no difference: either the collective good will be provided, and then a member benefits even without paying his share of the costs, or the collective good will not be provided, and then he does not benefit even when he is willing to pay his share. In other words, in a large group there is little or no incentive for a rational individual to participate in the collective action of the group and to pay his contribution. The rational individual is tempted to display parasitic behaviour or free ridership. As a result, a rational individual in a large group - whatever assumption he makes - will not participate unless an incentive is offered.

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6 Note that a common interest is translated into a collective good. A pure collective good has two characteristics: once it is provided nobody can be excluded from the consumption of the good (non-excludability) and consumption by one individual does not rival with consumption by another individual (non-rivalness). Together, these two technical characteristics of pure collective goods cause the so-called 'participation problem' in the collective action of a group.

7 The interest group theory can be considered as a special case of the well-known prisoner's dilemma. At the heart of the prisoner's dilemma, as Elinor Ostrom has stated quite correctly, is the free rider problem (Ostrom, 1990, pp. 5-7).
The incentive might be twofold. On the one hand, the rest of the group might decide to employ a positive or selective incentive to stimulate an individual to join the group by offering him a private good or service which he only receives when he does and from which he will be excluded if he does not. The provision of such a private good or service can be considered as a necessary, but not a sufficient condition for the production of the collective good. On the other hand, the group might turn to a negative incentive, for example coercion. In that case, a member of the group will be punished if he refrains from cooperation in the production of the collective good. The supply of incentives changes the pay-off matrix of the group members or, to state it differently, the decision of a rational individual to join (or to stay in) a group is not only guided by the costs and benefits of the collective good, but by the costs and benefits the incentives, too. Of course, the supply of an incentive is itself costly and these costs have to be taken into account by the group. This is true for a positive incentive as well as for a negative one.

In response to Mancur Olson, Richard Wagner has suggested that a political entrepreneur is of crucial importance for the organization of large groups. For this purpose, the political entrepreneur mobilizes latent public sentiment (by revealing a scandal or capitalizing on a crisis), puts the opponents of a plan publicly on the defensive (by accusing them of deforming babies or killing motorists), and appeals to widely shared values (clean air, pure water, health, and safety) (Wagner, 1966).* A political entrepreneur will be particularly effective when the benefits are widely dispersed and the costs narrowly concentrated, as is the case with the government intervention to solve environmental problems.

12.4 A TRAGEDY OF THE COMMONS?

The analysis of Mancur Olson is echoed by Garrett Hardin who has labeled the dilemma 'the tragedy of the commons', which he has illustrated as follows:

"Picture a pasture open to all ... As a rational being, each herdsman ... concludes that the only sensible course for him to pursue is to add another animal to his herd ... Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit - in a world that is limited" (Hardin, 1978, p. 1244).

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* Mancur Olson claims that the incorporation of the concept of an entrepreneur does not contradict or invalidate his conclusions, but rather enriches the argument and makes it a better tool for the study of organization leadership and change. The contributions of the different authors, as is usually the case in science, are cumulative.
The tragedy of the commons reappears in the problem of pollution. Here it is not a question of taking something good out of, but of putting something bad into the commons (Hardin, 1968). The question, to state it differently, is not how to provide a public good, but how to prevent a public bad.

The analyses of Mancur Olson and Garrett Hardin easily gives rise to serious pessimism about the possibility for solving the environmental problems we face at this moment. It is clear that the market will not solve these problems, but causes them in many cases, and that non-market agencies lack the right incentive to address the problems. Fortunately there are some ways out, as has been shown by Elinor Ostrom, who holds a less pessimistic view of the solution of environmental problems. She has proposed a variety of institutional arrangements - among which are rules to restrict the number of people who can use the common and rules to allocate the cost and benefits of the provision of the collective good among its users - to escape the underlying determinism of the 'tragedy of the commons' (Ostrom, 1986, 1988, 1990). In her view neither the market nor government can show us the way out, but some kind of public-private partnership is needed. Such a joint venture can lead us beyond the market/non-market dichotomy and hence offer us a way out of the various failures, either market or non-market. The economic market with his inherent failures is substituted by a political market, on which compromises are sought by means of exchange and negotiations.

In these negotiations a skilled political entrepreneur plays a pivotal role that - according to Terry M. Moe - might be twofold. A political entrepreneur is responsible for:

1. the internal organization, i.e. the administration and management of the group providing individual services to the members of the group in order to attract more individuals (Olson's selective incentives);
2. the common interest of the group, i.e. making use of the size and the political-economic weight of the group for the provision of a collective good to the members of the group (Moe, 1980, pp. 36-72).

At least three conditions have to succeed:
1. a sufficient number of potentially interested individuals must be willing to buy the services provided by the group and hence to join the group;
2. the political entrepreneur must have selective incentives to his disposal in order to lure new members into joining the group;
3. the net benefit must be positive for both, i.e. for the political entrepreneur providing the individual services to group members and for the group members as consumers of these individual services.
Mirror, mirror on the wall

The outcome of entrepreneurial politics depends mainly on the quality of the political entrepreneur. It is important that the political entrepreneur serves as the vicarious representative of the group, but does not directly participate in the legislative process. In that situation, an authoritative, former entrepreneur like Dekker (Philips) or Wagner (Shell) may be recommended.

According to Wim Hafkamp, the first signs of such a political market are already visible. First, a policy network in which the public sector and the private sector cooperate is growing, replacing the traditional situation in which they stand opposed to each other. A number of new actors have gained access to this policy network - e.g. individual firms, labour unions, consumer organizations, investment bankers and environmental organizations - shifting the power balance and changing the structure of the power game from a zero-sum game to a positive-sum game in which Pareto-optimal gains and win-win solutions can be found.

Second, the genesis of a policy network has enforced a reconsideration by all participants of their role, the goals to be attained, the means to meet these goals etc. The generation of new tools to cope with environmental problems enables agreement on (partial) solutions for environmental problems with hardly any government intervention as is the case with the so-called ‘bubble concept’.

Third, the government has started a reconsideration of the use of regulations, the enforcement of these regulations and the generation of alternative instruments like taxation - financial incentives instead of physical regulations - has started. The control of environmental policies will be more adequate and more intensive. In particular the way in which government has employed the argument of ‘legal liability’ of individual firms recently has been very effective. Moreover, it turned out to have a strong preventive effect on the way business behave in respect to environmental problems.

Fourth, the failing enforcement and control of environmental policies towards business has caused firms to take their own responsibility. A number of individual companies have established an internal unit for the scanning of the environmental problems caused by the production process.

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9 A political entrepreneur is motivated by his own individual interest and not by the collective interest of the group or, to say it differently, he will organize a large group in order to provide a collective good when he can make an individual profit out of it (Hardin, 1982, p. 35).

10 The philosophy behind the ‘bubble-concept’ is quite simple: the government sets a norm and leaves the enforcement of that norm to the industry. The industry is free to produce and to distribute pollution as long as this norm is not violated. The allocation of the pollution among the firms can be done through the introduction of tradeable property rights. The management of these property rights could be left to the private sector. It leaves the monitoring of the norm for public sector. Of course, monitoring is not priceless, but cheaper than allocation by government itself.
Finally, all kinds of cooperation between the public and private sector have been established such as the collection, transportation and recycling of waste products, the support of firm-internal environmental activities, the development of general standards for environmental pollution and environmental protection by production activities (Hafkamp, 1990).

The movements into the direction of a political market should be welcomed and should be stimulated from a normative point of view, because they can yield possible solutions for the non-market failures thusfar hampering an effective environmental policy. They can be accelerated substantially by a successful political entrepreneur. Of course, all this does not mean that the Wilsonian problem of the distribution of the costs and benefits of environmental policies or that the Olsonian problem of the organization of large groups in environmental policies has been entirely eliminated.

12.5 ECO-DEMOCRACY VERSUS ECO-TOTALITARIANISM?

The theory of non-market failure appears to be a useful tool for analysis of environmental policy. A number of policies to tackle environmental problems have received only small and fragmented support due to the weak organization of the beneficiaries. A large majority of society will enjoy only a small benefit per capita, whereas a small minority will bear the costs of an improved environment. The opponents are often very well organized and dispose over professional staffs with good access to bureaucracies that share the same values. They are very skilled in exploiting the technical issues around the implementation of policies. Moreover, it is very difficult to mobilize the public around technical issues as is the case with the discussion on the introduction of road pricing (In't Veld, 1991) and the reduction of manure production (Dietz/Termeer, 1991). This lobby is not counter-balanced by a well organized environmental movement.

It is sometimes suggested that the effectiveness of government intervention is frustrated by the inherent limits of representative democracy, which cause serious delay in decision making, induce fragile coalitions and compromises, lead to compromise-based and, hence, ineffective policies and, last but not least, generate democratic resistance against radical but necessary policies. It would seem to follow from this that if democracy is the cause of all problems of environmental policy, democratic institutions and procedures should be set aside in favor of a form of 'enlightened dictatorship' that, although perhaps not legitimate in the beginning, could earn its legitimacy by enforcing effective solutions for environmental problems where democracy has failed. The alleged failure of democracy in the defense of the vital interests of 'spaceship earth'...
and its population is then a legitimate argument for substituting for it a form of 'ecototalitarianism'.

The theory of non-market failure provides evidence that democracy is not the cause of the problem and that substitution of democracy by enlightened dictatorship will only aggravate the problem. Indeed, all of the failures distinguished by Wolf originate in the imperfection of democratic control rather than in its perfection. These failures will be aggravated rather than mitigated by constitutional reform in the direction of totalitarianism. In our view, democracy is not part of the problem of, but rather the heart of the solution for environmental problems. Therefore, we believe that only democracy can offer effective remedies for market as well as non-market failures in environmental policy. Democracy should not be abolished but should be strengthened, if not for the sake of democracy itself, then for the sake of our environment and of our future.

Recent publications on environmental problems and the policies to attack these environmental problems can be considered as a benchmark for a fundamental change in the public debate on environmental affairs. The necessity to punish the polluter is underlined once again and additional, financial instruments are introduced for this purpose. However, our analysis has made clear that it is not enough to count on negative incentives, because these will be rolled-off to the consumer. In addition, skilled political entrepreneurs are required to mobilize and organize public support for the effective solution of environmental problems, to manage the political agenda and to act as an important countervailing power against the lobbies of powerful interest groups from various sectors of society. Every policy change that is effective will inevitably produce winners and losers and accordingly will provoke resistance from business and society. This is certainly true for the necessarily radical changes in environmental policies. Only organized bottom-up political pressure will bring about such radical changes. However, it not very likely that a political entrepreneur will be successful unless he has at his disposal incentives, especially positive incentives like private goods to stimulate individuals to join the group and to foster their common interest: 'homo sanus in circumspecto sano'.

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11 See for instance the plea of Robert L. Heilbroner for 'iron' or 'military' governments (Heilbroner 1974).
REFERENCES


Hafkamp, W.A. (1990), "Contouren van een schone economie" (Silhouettes of a clean economy), inaugural lecture Katholieke Universiteit Brabant d.d. 16 November 1990.

Hardin, G. (1968), "The tragedy of the commons. The population problem has no technical solution; it requires a fundamental extension in morality", *Science 1968*, 162, 1234-1248.


Ostrom, E. (1986), *How inexorable is the tragedy of the commons?*. *Institutional arrangements for changing the structure of social dilemmas*, Indiana University, Bloomington.


