Rent Leaving

by

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1. Introduction

Economic rents are the driving force of market economies. Resource owners constantly look for opportunities to create and exploit economic rents which, however, in the dynamics of the market process dissipate as new entrants seek to appropriate the profits. In equilibrium, economic rents are eliminated. Not so in different institutional settings. While rents in the market endogenously come and go, they are artificially created and sustained in political and bureaucratic decision-making. In analogy to individuals' behavior in the market, it is assumed that politicians, bureaucrats, pressure groups, voters and taxpayers strive for political rents. Rent seeking in the political arena may also increase an individual's income but, in contrast to the market, is not socially beneficial.

We argue that institutional settings are not only apt to encourage *rent seeking* but allow for *rent leaving* as well. While the market mechanism induces the profit-seeking butcher and baker to produce collectively beneficial results, in non-market decision-making, individual profit maximization has to be traded off against socially productive investments. We speak of rent leaving when subjects do not invest in something that is unproductive for others but that would increase their own income. Rent leaving thus encompasses all forms of other-regarding behavior such as charitable giving or contributions to public goods, independent of whether pro-social behavior is Pareto-improving in pay-offs as the pie gets bigger. In all cases, individuals have to decide whether they want to maximize their personal income – which is the dominant strategy – or whether they prefer to take into account somebody else's well-being as well, i.e. to leave rents.

Rent leaving exists as long as individuals derive intrinsic benefits from other-regarding behavior. Such behavior need not be irrational. The formation of such preferences may be the result of selfish parents trying to rig their children's

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preferences toward pro-social behavior (BECKER [1992]). Individuals then raise their utility by living up to their moral obligation to leave rents. This moral obligation, however, can be crowded out. A group of cognitive social psychologists [1] has analyzed the phenomenon that external rewards undermine intrinsically motivated moral obligations. Extrinsic incentives deprive individuals of the possibility of indulging in pro-social feelings. After all, no one can pretend to act out intrinsic motivation if extrinsic incentives offset the disutility generated by a certain act. Thus, by destroying the possibility of showing one's intrinsic motivation, extrinsic incentives can negatively affect the motivation itself.

Building on "the hidden cost of reward," FREY [1997a] formulates a generalized "*crowding effect*:" Extrinsic incentives and intrinsic motivational forces are regarded as scarce factors guiding human behavior. In the case of both motivators being active, individuals reduce the scarce motivator that is under their control, namely intrinsic motivation. In this paper, we investigate the extent to which intrinsic motivation is *crowded in* if extrinsic incentives are insufficient to produce socially efficient outcomes. Which institutional setting is able to activate intrinsic motivational forces?

The concept of intrinsic motivation is developed in section 2. Private donations are often intrinsically motivated. Empirical evidence shows that they may not easily be substituted for by public contributions. This non-substitutability, however, only holds as long as individuals' capacity to derive intrinsic value from the act of voluntary giving, i.e. from rent leaving, is not destroyed. Section 3 argues that a specific institutional framework is required to allow for intrinsic motivation to be active. "*Motivation compatible mechanisms*" (MCM) enable individuals to live up to their intrinsic motivation. To qualify as an MCM, an institution must fulfill two requirements; it must allow individuals to send and to receive messages on the motivational basis of an action: *Firstly*, the sender of a message must be able to credibly demonstrate that his behavior results from intrinsic and not from extrinsic motivation. MCM must allow for *motivational self-determination*. *Secondly*, the recipient of a message must be able to credibly demonstrate that she acknowledges intrinsic motivation. MCM must allow for *motivational acknowledgement*.

What rent leaving means in the most prominent social dilemma, the prisoner's dilemma, is analyzed in section 4. It is argued that communication allows for rent leaving. Section 5 discusses the empirical relevance of rent leaving in politics. Intrinsic motivation is of major importance for the relationship between the citizens and the state. It contributes to a better understanding of why people pay their taxes. Section 6 offers concluding remarks.

[1] The work is summarized in DECI and FLASTE [1995]. Extensive meta-analyses are presented by WIERSMA [1992] and CAMERON and PIERCE [1994].

2. Intrinsic Motivation

Intrinsic preferences relate to activities one undertakes for one's own sake. "One is said to be intrinsically motivated to perform an activity when one receives no apparent reward except the activity itself" (DECI [1971, 105]). While intergenerational altruism towards one's kin is not considered to be intrinsically motivated rent leaving, anonymous gifts to support unrelated strangers or worthy causes meet the criteria: Individuals are prepared to give up part of their income – well beneath opportunity cost earnings – for the common good. In Switzerland, 0.46 percent, in Germany, 0.18 percent and in France, 0.13 percent of personal income was donated in 1990. Charitable contributions in the United States amount to an annual average of 0.57 percent when giving to religious groups is excluded (SALAMON and ANHEIMER [1994]). Even though the share of income donated seems quite low, it clearly indicates that individuals do not act as free riders or rent seekers all the time. Rather, human beings seem to be intrinsically motivated to leave rents.

That individuals derive personal satisfaction from the act of giving is corroborated by empirical evidence. Several studies have demonstrated that the standard public good model which assumes that charity is motivated by "a desire to improve the general well-being of recipients" (BECKER [1974, 1083]) cannot explain the data in a satisfactory way. In this case, individuals should not care whether the contribution is in the form of a voluntary private gift or an involuntary tax transfer. Contributions by the government and private giving are taken to be perfect substitutes. Field studies of charitable giving, however, have found that substitution is imperfect. An increase in government spending on charitable contributions only leads to very small decreases in private giving, ranging from 5 to 28 percent (e.g. KINGMA [1989], KHANNA, POSNETT and SANDLER [1995]). Individuals not only derive benefits from the overall level of contributions but also from their personal giving. This benefit of giving, the "warm glow" (ANDREONI [1990]), is not related to the amount contributed by others but directly depends on the act of giving.[2] People are "committed" (SEN [1977]) to leave rents. An involuntary, and thus extrinsically motivated, transfer does not provide the same satisfaction as voluntary, intrinsically motivated giving. It is intrinsically motivated rent leaving which induces individuals to refrain from income maximizing and to invest in the common good.

[2] For experimental and empirical evidence see BOHNET [1997a]. Intrinsic motivation leads to constant giving independent of the number of beneficiaries in dictator games and in contingent valuation studies.

3. Motivation Compatible Mechanisms

Economic theory suggests building human interaction on incentive compatible mechanisms. Individuals' opportunity sets are altered so as to make rent leaving the rational response. This focus on the relative performance of different contractual arrangements has been a successful research strategy. The standard relative price effect, e.g., applies to rent leaving as well as to all other human actions. Individuals are less other-regarding, the higher the cost is. They systematically reduce the extent to which they conform to environmental norms the more expensive compliance becomes (DIEKMANN [1996]). In experiments, a relative price effect may almost always be produced. Subjects in the laboratory are less other-regarding in dictator games, the higher is the price of fairness (EICHENBERGER and OBERHOLZER-GEE [1997]) and contribute less to public goods, the more attractive are private investments (SMITH and WALKER [1993]).

Rule-guided behavior, however, makes it impossible for the observer – be it a scientist or another actor in the game – to learn about individuals' underlying motivations. Within an incentive compatible regime, individuals never know whether their counterparts would have been intrinsically motivated to leave rents in the absence of any external restrictions. Indeed, if all behavior could be governed by imposing constraints (costlessly), people should not care about intrinsic motivation. Motivational dispositions to leave rents would become superfluous, no investments would be undertaken to nourish one's capability to be intrinsically motivated.

The price of incentive compatibility is the loss of intrinsic motivation. This becomes the more regrettable, the costlier it is to secure productive interaction by relying on economic incentives alone. While incentive compatible devices improve technical and allocative efficiency, social efficiency, i.e. the production of the public good, seems much harder to achieve. Compliance with the law, e.g., has been shown to depend little on deterrence. Research on all types of law-related behavior such as tax cheating, shoplifting or drug use indicates that the probabilities of being caught and punished would have to be extremely high for deterrence to influence behavior. In the United States, the objective risk of being caught and imprisoned for assault, burglary, larceny and motor vehicle theft is only 1 percent, for robbery it is 4 percent and for rape it amounts to 12 percent. However, for a deterrence-based strategy to be effective, the risk would have to be as high as 45 percent – which is the probability that offenders in homicide cases are caught and punished (TYLER [1997]).

While theoretically it would be possible to create an "incentive compatible equilibrium" by raising probabilities to very high levels, most societies are not prepared to carry the monetary and social cost accompanying such a policy. Big brother would be watching extremely closely over everybody's shoulders. A second equilibrium can evolve if institutions are not "incentive compatible" but rather "motivation compatible." *Motivation compatible mechanisms* do not restrict individual actions but allow intrinsic motivations to govern behavior.

Thus, only an unrestricted opportunity set allows individuals to act according to their motivations and to learn about others' underlying motivations. Imagine a person A who wishes to cooperate with B. A can either take all possible precautions by making sure that defection would be very costly for B, or she can test B's intrinsic motivation by purposely not doing so. B, on the other hand, knows that only in the latter case is he able to exhibit his intrinsically motivated willingness to cooperate.

This kind of voluntary rent leaving is thus possible only if A gives B the chance to show his motivation and if B knows that A is in a position to acknowledge his motivation. Self-determination and acknowledgement are crucial for A's and B's willingness to voluntarily leave rents:

Self-Determination. When individuals perceive an external intervention to reduce their self-determination, they substitute intrinsic motivation by extrinsic control. Following ROTTER [1966], the locus of control has shifted from the inside to the outside of the person affected. Individuals who are forced to behave in a specific way by outside intervention feel overjustified if they maintained their intrinsic motivation ("*overjustification effect*").

Acknowledgement. When an intervention from outside or other people's reactions carry the notion that the actor's motivation is not acknowledged, intrinsic motivation is rejected. The person affected feels that his involvement is not appreciated which debases the value of being intrinsically motivated.

A motivation compatible mechanism must provide both for B to be self-determined and for A to acknowledge B's self-determined choice. This is not possible if A and B decide in an abstract setting, isolated from one another. In perfect competition or in the pure price system, the relationship between the individuals is solely guided by the price, and there is anonymity between the partners. Hence, there is no chance for intrinsic motivation to evolve. As soon as one moves outside the pure price system, to hierarchical or democratic decision-making and to bargaining, personal interactions become important. The degree of "social embeddedness" (GRANOVETTER [1985]) or "cojointness" (COLEMAN [1990]) among two actors systematically influences crowding. Personal relationships may be created in the laboratory by permitting the subjects to communicate with each other. This face-to-face interaction allows for intrinsic motivation to play a role in influencing individual decisions.

4. Communication

The dilemma between private income maximization and social efficiency may be best demonstrated by referring to the prisoner's dilemma. Free riding is individually rational but produces collectively sub-optimal results. An individ-

ual is worse off if everybody defects compared to a situation in which everybody contributes to the public good. Rent seeking implies aspiring to the highest absolute rent. Everybody should try to convince everybody else to contribute to the public good but choose the defective solution. Opportunistic utility maximization relies on all weapons available, such as cheating and lying, as long as they do not have any negative consequences for the individual. Rent leaving, on the other hand, means not taking advantage of a situation in which the individual may produce the socially optimal outcome by forgoing individual benefits. It is equally active as rent seeking. Conditions are created which give people the chance to leave rents. Communication transforms anonymous others into specific human beings and creates personal relationships crowding in intrinsic motivation. As no binding contracts can be closed, pre-play communication – in a formal sense – does not provide any extrinsic incentives to leave rents. Non-binding pre-play communication is labelled "cheap talk" by game theory and is not expected to exhibit any influence on individual behavior in public good type settings (FARRELL and RABIN [1996]). Thus, communication is a motivation compatible mechanism as it does not externally restrict individuals' opportunity sets. Subjects are *self-determined*.

We suppose, however, that subjects are able to learn about others' likelihood of cooperation. In typical public goods games, subjects do not know what others do but have expectations about others' behavior. Expectations, it is often argued, may only be specified by experience, by a joint history. In repeated games, individuals learn about others' likelihood of cooperation (ANDREONI [1988]). In one-shot games, on the other hand, no such specification seems possible – unless individuals are able to talk to each other before taking a decision. Communication thus helps subjects in learning to what extent others *acknowledge* their intrinsic motivation to leave rents, thereby decreasing the fear of being exploited by others.

While communication informally provides for acknowledgement of intrinsic motivation, a formal institution has also been experimentally explored. Those who are not intrinsically motivated to leave rents can be forced to acknowledge cooperators' intrinsic motivation by extrinsic incentives. As the defectors are not intrinsically motivated in the first place, crowding out is not a problem. The cooperators' fear of being suckered is accounted for by guaranteeing that all beneficiaries of the public good will have to pay their share if a minimally needed part of the public good is provided. If in a "minimal contributing set game" or a "step level public goods game" the previously specified number of people chooses cooperation, everybody else will be forced to contribute, too. Using the "enforced contribution mechanism" significantly increases cooperation (ISAAC, SCHMITZ and WALKER [1989]).

Such a formal mechanism, however, is absent in most real life rent leaving situations while communication is much more prevalent (OSTROM, GARDNER and WALKER [1994]). By now, a wealth of experimental evidence exists showing that communication strongly and significantly raises cooperation. In our four-person prisoner's dilemma experiment at the University of Zurich, non-binding pre-play communication for ten minutes induced subjects to cooperate significantly more often than under anonymous conditions. While in anonymity, 12 percent of the subjects (N = 172) decided for cooperation, after communication 78 percent of the participants (N = 100) chose the cooperative solution (FREY and BOHNET [1995]). These results were corroborated by other experiments with one-shot communication and decisions (BOHNET [1997b]). A meta-analysis (SALLY [1995]) comparing over 100 studies in the principal (English language) journals of political science, social psychology, economics, and sociology strongly supports the cooperation-increasing effect of communication: 130 different treatment conditions are included, one third of which involve communication among the participants; in a multiple analysis, the author finds that the presence of discussion in one-shot games is highly significant, and on average raises the cooperation rate by more than 45 percentage points.

None of these studies investigated rent leaving. In order to understand to what extent individuals are ready to leave rents, we need to know whether participants are able to determine the extent to which their intrinsic motivation is acknowledged by talking to other people. FRANK [1988, 140] reports that subjects are able to predict others' behavior quite accurately in a prisoner's dilemma. After having talked to one another, 75 percent of the participants correctly predicted whether others would cooperate or defect in the following prisoner's dilemma game. An experiment by BRAVER and WILSON [1986] further stresses the power of communication. Groups consisting of nine members were confronted with two institutional settings: Half of the groups had to decide anonymously whether they wanted to cooperate or to defect; all other groups were split into three sub-groups so that only three persons could talk to each other. As the minimal contributing set consisted of five persons, no sub-group could provide the public good unilaterally. Subjects had clear ideas about the effect of communication. They expected other communicating persons to cooperate with the probability of 88 percent when the others were included in their group and with 65 percent when others were part of another group. Only 48 percent of the anonymous participants were expected to cooperate. Interestingly, participants also predicted higher cooperation rates for communicating persons with whom they had never interacted. Their predictions were quite accurate again. Compared to the anonymous treatment condition, sub-group communication increased cooperation from 48 percent to 75 percent on average. This contradicts the much discussed "in-group effect" in psychology (CAPORAEL et al. [1989]). Partial (sub-group) communication substantially increases cooperation in this public good framework. Subjects were prepared to contribute to the public good because they believed in the cooperation-increasing effect of communication.

5. Rent Leaving in Politics

Crowding theory helps to explain how constitutional and other legal rules affect the individual citizens. Intrinsic motivation in the form of civic virtue is bolstered if the public laws convey the notion that citizens are self-determined and that their intrinsic motivation is acknowledged. Such self-determination is reflected in extensive democratic participation possibilities. Citizens are given the freedom to express themselves, to be heard by the politicians and public officials, and to carry out discussion with them. The basic notion enshrined in the constitution that citizens are on average, and in general, reasonable human beings thus crowds in civic virtue. In contrast to such self-determination stands a constitution which curtails political participation rights because the "classe politique" feels that citizens are unable to take reasoned political decisions.

Being determined by others also manifests itself in a constitution which gives the government great power to intervene in the economy and society, thus leaving little room for individuals to act on their own. Controls by bureaucracy and police are extensive, and no citizen is taken to be intrinsically motivated. Without possibilities for self-determination and acknowledgement, citizens are not prepared to leave rents and take full advantage of all opportunities by breaking the law whenever they expect to do so at low cost. They become rent seekers.

Attempts to measure the effect of different constitutional conditions on citizen's intrinsic motivation to leave rents are faced with obvious difficulties. Most promising is an indirect approach looking at revealed behavior in equilibrium. It is applied here to rent leaving in the form of tax morale (see, more fully, FREY [1997b]). As has been well-established, tax-paying behavior cannot be explained in a satisfactory way without taking tax morale into account. Thus, based on the American Internal Revenue Service's Taxpayer Compliance Maintenance Program, GRAETZ, REINGANUM and WILDE [1986] attribute the falling tax compliance in the United States to the erosion of tax morale (see also SLEMROD [1992]). To what extent tax morale can be crowded in depends on the type of constitution. Switzerland presents a suitable test case because the various cantons have different degrees of political participation possibilities (see, more fully, POMMEREHNE, HART and FREY [1994]). The more extended are political participation possibilities in the form of citizens' meetings, obligatory and optional referenda and initiatives, the more rent leaving is expected. An econometric cross section/time series analysis (relating to 26 cantons and three years) reveals that in cantons with a high degree of direct political control, tax morale is (ceteris paribus) higher. In contrast, in cantons with a low degree of direct political control, tax morale is (ceteris paribus) lower.

6. Conclusions

People do not exploit all the opportunities available to them – not because they lack information or intelligence but because they conceive themselves as human beings who want to live up to their intrinsic motivation. We have investigated the extent to which institutional arrangements crowd in intrinsic motivation to produce socially efficient outcomes. Intrinsically motivated pro-social behavior is called rent leaving. It can only emerge in the absence of extrinsic incentives as they deprive individuals of the possibility of indulging in pro-social feelings. Only an unrestricted opportunity set allows individuals to act according to their motivations and to learn about others' underlying motivations.

Motivation compatible mechanisms – in contrast to incentive compatible mechanisms – do not restrict individual actions but allow intrinsic motivations to govern behavior. Individuals are prepared to voluntarily leave rents if they are self-determined and if their intrinsic motivation is acknowledged. Empirical evidence, including econometric research and experimental studies, strongly suggests that institutions providing possibilities for self-determination and acknowledgement crowd in rent leaving in the form of civic virtue, voluntary tax compliance, work moral and environmental ethics. Experimentally, it was shown for a prisoner's dilemma that personal relations enabled by face-to-face communication strongly increase individuals' willingness to leave rents. Field data, comparing different forms of democratic governance, further suggest that institutions fostering self-determination induce the citizens to leave rents. Rent leaving in the form of voluntary tax compliance is more broadly observed in direct democracies than in representative democracies.

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