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NON-LEGAL SANCTIONS

Stephan Panther

Institute of Economics, AWM, Universität Hamburg

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Abstract

The study of non-legal sanctions is a comparatively new area in law and economics, which is developing fast. Little universally agreed upon stock of knowledge exists and relevant contributions are spread in diverse fields. Therefore, the main aim of this review is to provide a systematic and integrated view of the topic. It is placed firmly in a New Institutional framework and a clear classificatory structure is developed. Non-legal sanctions are seen to flow from informal social norms, which are systematized using a game theoretic perspective. From this departure, the host of applications to diverse substantive areas of law can be presented clearly. Outstanding contributions are highlighted.

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A. Introduction

1. The Limits of Legal Rules

Law and economics has focused on the analysis of the (efficiency) effects of formal legal rules, which are enforced by a specialized central agency, 'the state', employing legal sanctions. However, even in fully developed market economies with a high degree of division of labor, formal legal rules do not comprise the total picture. They would do so only if it were possible to *specify* and *enforce* a comprehensive set of property rights perfectly, and, building on this, perfectly specify and enforce contracts. In such a world, actors would only interact through voluntary contracts, not influencing each other in any other way. It is a perfectly secure world. Even if it is not characterized by perfect and complete information for every actor, actors' expectations concerning each others' behavior are sure to be fulfilled since an omniscient, omnipotent and benevolent government guarantees perfect enforcement. This world, of course, is utopian.

The world we live in knows only incompletely specified and enforced property rights and contracts. The arm of the law does not reach everywhere. Crimes remain unsolved, courts err and using them is costly, and hence some

cases are simply never filed. Contracts do not contain provisions for all possible contingencies that might arise. Rulers, politicians and government officials are self-interested and hard to control and it actually might be a blessing that they are not omniscient and omnipotent. In our world, formal legal rules and legal sanctions no longer determine behavior with certainty. Other factors co-determine actions. Especially non-legal rules (social norms) and non-legal sanctions play prominent roles.

Before turning our attention to these (see also the comments on Lindenberg, 1990, and Schlicht, 1997, in Section 6 below), it should be noted that the other important factors shaping action are cognitive rules and schemata. After all, it is the subjective perception of rules and sanctions which matters for individual behavior, a point stressed by Opp (1985). Denzau and North (1994) discuss this issue in a neo-institutionalist framework. Lessig (1996) and Sunstein (1996) raise some cognitive issues in relation to law, the latter especially suggesting that the mere declaration of a rule as a law may influence the prevailing social norms.

2. A Framework for Classification

Since the term sanction is somewhat ambiguous, a note of clarification is necessary right at the start. Sociologists usually use it to describe both punishments and rewards, while legal scholars frequently only consider punishments (but see Ellikson, 1991, pp. 124-126). Fortunately, little in the following depends on this distinction in a fundamental way. I will generally follow the legal usage here, explicitly noting deviations.

Any system of sanctions faces the same issues. At a first level these are: who decides about the sanction, how, And who administers the sanction? All of these may be examined in greater detail. Ellikson (1991) (see also Ellikson, 1987), probably *the* seminal contribution on non-legal rules and enforcement, distinguishes five types of rules applicable to sanctioning systems (pp. 132-136). 'Constitutive rules' answer the first of the 'who' questions above, relating especially to the structural aspects of the question (for example, which court is in charge?). 'Controller-selection' rules give an answer to the second 'who' question in a systematic fashion (for example, first vs. second party control, see below). 'Procedural', 'remedial' and 'substantive' rules relate to the 'how' question above. 'Procedural rules' refer to the way information has to be obtained, weighted, interpreted, and so on by those who impose sanctions. 'Substantive rules' define the kind of behavior to be sanctioned, 'remedial rules' regulate the type and severity of the sanction. Together the latter two describe the criteria used in imposing sanctions.

I see the distinction between non-legal and legal sanctions as drawing on the last two types of rules only; a legal sanction is administered in accordance

with criteria laid down in a legal rule. Of course, the law frequently delegates the decision over the precise content of the required behavior to other, possibly private, actors. Contract law is centered on this idea. It nevertheless remains clear when conduct is law abiding and when not. In modern western societies the law also regularly contains binding constitutive, procedural and controller selection rules, the existence of which is, however, not taken as part of the definition of a legal sanction here.

Social norms are to non-legal sanctions what laws are to legal sanctions. Coleman (1990), Elster (1989a) and Hechter (1987) are monographs containing comprehensive treatments of social norms from a methodological individualistic perspective. Coleman is the prime reference. Elster's treatment, while full of insight, is hampered by his non-consequentialist definition of norms. Opp (1985) is a systematic account in the form of an article, Opp (1979) provides a systematic comparison of sociological and economic accounts of norms as far as available at the date of publication.

All of the aspects of a sanctioning system just discussed may be regulated by a system of social norms. The main debate has, however, been on the issue of whether a mere substantial rule, a prescription or prohibition of an action, constitutes a social norm, or whether an attached remedial rule, the specification of a sanction in case of deviation, has to be present, too. The latter view is taken here, which is argued, for example, in Weise (1996). It is also implied by Coleman (1990, pp. 241-249), while Elster (1989a, pp. 98-100) favors the former. See Crawford and Ostrom (1995) for a comprehensive discussion.

Given the primary focus of this review on non-legal sanctions, we will classify social norms by the way they are enforced. While the following is *one* common classification, it is by no means universally accepted. It follows largely Ellikson (1991, pp. 123-136) and Kiwit and Voigt (1995). (See also James Coleman, 1990, pp. 241-249 for a somewhat different view.)

External norms are enforced through sanctions by non-specialized members of a society. Ellikson (1991) further distinguishes situations where sanctions are administered by those against whom a norm has been transgressed (*second party control*) from those where originally nonaffected parties are involved in sanctioning (*third party control*). Decisions about and enforcement of the sanction may lie with the same actor or may be separated. The non-specialized nature of enforcement does not imply anything about the severity of the sanction, which may range from expression of disapproval to ostracism to physical violence.

Internal norms have been internalized to such a degree that their transgression, while benefiting narrow self-interest, causes discomfort, psychic costs. In contrast to external norms, issues of policing do not arise here. The very actor who deliberates a deviation from a rule also sanctions himself (*first party control*). Cooter (1996) (Cooter, 1994, is an earlier version) contains a

systematic treatment as a foundation for his public policy recommendations (see Section 13).

Borderline cases, where the term ‘social norm’ for the basis of a sanctioning system is somewhat stretched, are those where the relevant rules are codified and sanctions are decided about and possibly even enforced in an organized fashion by specially designed agents (‘Third party control by organizations’ in the terminology of Ellikson, 1991, ‘formal private rules’ for Kiwit and Voigt, 1995). As long as the rules are not given legal status, this is still a case of non-legal sanctions.

Recently, the term ‘convention’ (dating back as least as far as Weber, 1921[1978]) has reappeared in economic and New Institutional theory as a rival to the term ‘social norm’, as for example, in Sugden (1986) and Young (1996). The latter define ‘convention’ in game theoretic terms as a particular equilibrium in games with multiple equilibria. If external norms are modeled as games (see Sections 4 and 5), they constitute ‘conventions’ in this sense too. By way of contrast, I suggest limiting the use of the term ‘convention’ to norms which are self-enforcing in a narrow sense: self-enforcing even in the absence of any sanctioning action. This implies that deviating from equilibrium strategies is not profitable even if everybody else merely continues the behavior prescribed on the equilibrium path in the absence of deviation. The typical example is an equilibrium in a coordination game, driving on the prescribed side of the road being the notorious real world case. By this very definition, ‘conventions’ lie outside the scope of this paper.

3. Basic Relationships between Legal and Non-Legal Sanctions

A non-legal sanction may be complementary to a legal sanction, both requiring the same action in a certain situation. In this case, non-legal sanctions add to the effect of legal sanctions. Obviously it is also possible for legal and non-legal norms/sanctions to work in opposite directions, making them conflicting, just as a neutral case may arise.

When the non-legal and legal norms conflict, the question of the dynamic development of the two arises. No generally accepted theory exists. Taxonomically, one may distinguish three cases. First, social norms may regularly adapt to legal rules. In this vein, in an article also interesting because of its substantial focus (see Section 12), Ramseyer (1987) seems to suggest that norms follow legal incentives, making them effectively an appendix to formal institutions. The reverse position, social norms regularly forcing legal rules to adapt, is rarely taken in New Institutional thinking. The third position, the two influencing each other with the one or the other being dominant from time to time, seems to dominate. North (1990) offers a comprehensive treatment in

a general New Institutional framework. He suggests the possibility of path-dependency in the institutional development caused by the persistence of non-legal rules. Kiwit and Voigt (1995) discuss this critically. Cooter (1996) discusses the development of internal norms using arguments from evolutionary game theory, also emphasizing the reciprocal interaction of external and internal norms. He sees the existence of network externalities in norm-adherence as a possible cause for path-dependency in their development. Adams (1996) adds the dependency of a norm on the context of other existing norms as another important reason for path-dependency: informal norms come in hierarchically connected systems, meta-norms helping to interpret more specific ones. All in all, social norms are likely to be interlinked with legal rules and with each other, making change a slow, gradual process occasionally interrupted by big jumps.

A special and particularly strong case of conflict occurs when non-legal sanctions involve actions prohibited by law, that is, the infringement of legal rights. This subcategory can be referred to as *extra-legal sanctions*. They are dominant in organized crime, and I refer the reader to Chapter 8400 (Organized Crime and Illegal Markets) in this encyclopedia. I will speak of non-legal sanctions, whenever the above conflict is not present. It is in this narrow definition that we will use the term from now on.

The last distinction draws our attention to an important final point. If non-legal sanctions do not violate legal rights, how are they possible? For a sanction to exist, the sanctioner needs to be able to act in a way that diminishes the utility of the wrongdoer. Thus, non-legal sanctions are only possible in a world where not all 'assets' of an actor consist of legally protected rights. In the terminology of Charny (1990, p. 392), the sanctioned party of the interaction has posted a 'bond' which can be confiscated by the sanctioning party. Böhm-Bawerk (1881), in an early treatment of related issues, termed these non-legal assets 'Verhältnisse' ('relationships'). In a world where property rights are perfectly specified and enforced, no such non-legal 'assets', and hence no non-legal sanctions, would be available.

We have now come full circle and will in the following Sections 4 to 6 turn to a survey of the theoretical literature on non-legal sanctions which tries to clarify the mechanisms involved in non-legal sanctioning systems. The following sections then survey the applications in several substantive fields.

B. Theory

4. External Norms: Second Party Control

If only the parties involved in an exchange are able to impose non-legal sanctions on each other, the non-legal assets used in the process may be termed *relation-specific prospective advantages* (Charny, 1990, p. 392). The sanctioning action usually consists in the termination of the exchange, at least for long enough periods to deter deviations in the first place. Eger (1995, Chapter 4) contains a systematic treatment of second party control, as do E. Posner (1995) (see also Section 13), Rubin (1993) and Kronman (1985) (discussed also in Section 11).

The most straightforward way to conceptualize relation-specific prospective advantages can be traced back to Williamson (1983) (but see the earlier work by Schelling, 1960, p. 135; see also Williamson 1985, Chapters 7 and 8). The central idea is the posting of 'hostages'. The exchange partner A, prone to undertake an opportunistic breach of agreement, takes an action which gives the trading partner B control over an asset which is valuable to A (but not necessarily to B). A prime example is relation-specific investment, which pays considerably less outside the present relation. By leaving the relationship after being cheated, a partner can thus sanction the cheater. The emphasis here lies in the direct, possibly deliberate, creation of relation-specific advantages by the parties to the exchange themselves.

The dominant conceptualization of a sanctioning system involving relation-specific prospective advantages is the idea of a repeated game. Taylor (1976) and Ullmann-Margalit (1977) are early exemplary versions which are often cited outside economics and game theory. The theory covers both bilateral and multilateral games. It relies on the game never definitely ending in any particular period. A deviator is punished by all others in the game, who are all second parties, since they are all hurt by his deviation. Here the relation-specific advantage consists in the value of repeating the exchange/cooperation with the established partner in comparison with the value of the next best alternative, given by the non-cooperation payoff. Besides the payoff difference between cooperation and outside-option, the time horizon determines the severity of the sanction possible. The latter is caught in the discount factor which determines the weight of future payoffs. In the context of repeated games it may also be interpreted as reflecting the exogenous chance that an actor 'dies', that is, leaves the game which leads to the separation of the partners.

A notorious problem with the idea of cooperation being sustained by repetition of exchange is the multiplicity of equilibria in repeated games, which in fact regularly have an infinite number of equilibria. No universally accepted theory of choosing among them exists, even though the idea that people

eventually manage to coordinate on pareto optimal ones (that is, cooperative ones in this context) has intuitive appeal. We sidestep this issue and continue the discussion focusing on the cooperative equilibria made possible in the game structures under review.

Note that important additional questions arise in the multilateral case: How is information about deviations disseminated? Can it be trusted to be correct? How can actors be motivated to administer a sanction? The information issues are usually 'dealt with' by choosing appropriate assumptions, most frequently by the public observability of deviations. Before elaborating on the motivation question it should be noted that its relevance is not absolutely obvious. After all, in the situations treated in this section, everybody is a second party, that is, directly affected by a deviation. The main issue, however, is whether an action other than delivering the required sanction exists which is more advantageous to the actor in question. This will not be the case when the actions required for sanctioning constitute an equilibrium in the stage game (the one-period game which is repeated over time). Otherwise an actor is tempted to deviate from the punishment path. A host of formal contributions have dealt with this problem, Abreu (1988) being a central one. The idea of the formal solution is to punish the deviator from a punishment path (forgiving the original deviator) and anybody deviating from that punishment path, and so on.

Models of repeated interaction become more interesting if the factors determining the severity of the sanction, that is, determining the relative gain from cooperation, are explained endogenously. Klein and Leffler (1981) and Telser (1980) are early contributions in this vein. They center on the idea that raising the price paid to the supplier in an exchange, and thus *ceteris paribus* raising his profit, will make the exchange opportunity more valuable to him. If the supplier can manipulate the quality of the good and the buyer can detect this only *ex post* and if a high price is paid only if customers expect high quality, increased profit from the sales of high quality constitutes a relation-specific advantage. The underlying basic idea is fairly general and has been applied widely especially in the theory of efficiency wages. Within that body of theory the contributions by Akerlof (1982) and Shapiro and Stiglitz (1984) contain explicit formulations of the kind of non-legal sanction mechanism considered here.

Recently a closely related mechanism has been studied by Kranton (1996a) and Ghosh and Ray (1996) in the context of random matching games. A bilateral cooperation game (a kind of prisoners' dilemma in continuous strategies) is played between two actors, who can decide to continue the cooperation next period or leave the relationship. If they do leave, they are randomly matched with another unmatched player. What stops players from always trying to cheat each other and quit the relationship immediately afterwards? There exists an equilibrium where two newly matched players do not cooperate fully right from the start, but rather build up cooperation slowly.

Leaving an exchange partner in such a situation is costly since a renewed buildup of cooperation is necessary. In this way, an existing relationship again offers relation-specific advantages.

Kranton (1996b) provides a different endogenous explanation of the possible size of non-legal sanctions in a relationship conceptualized as a repeated game. She considers a model where relational exchange and anonymous search markets are mutually exclusive alternatives for any particular actor. If actors cheat in an ongoing relationship they have to withdraw into the market forever. Payoffs in the search markets determine the severity of this sanction. The proportion of actors engaged in relational exchange also feeds back to the market, however, due to search externalities (thick market externality: more people on the market make search easier). The reciprocal influence of the two institutions may lead to either of them prevailing even if the other one is efficient. A related model is Kultti (1995). Pairwise lifelong credit contracts between agents are enforced by the threat of trading on a barter market. Agents come in two types and asymmetries in production possibilities and numbers of actors per type determine the result.

The related but distinct idea of the *reputation* of an actor has been introduced into the formal game-theoretic literature by Kreps et al. (1982). They consider a repeated prisoners' dilemma with a definite end known in advance. If for all agents non-cooperation were the equilibrium in a one shot game ('non-cooperative actors'), cooperation would not be possible. Non-cooperation would always result in the last period, since no sanction for deviation from the norm would be available in the future. This being so, non-cooperation would result in the second to last period, and hence in the third to last period, and so on. In the model of Kreps et al. (1982), cooperation is nevertheless sustainable, since actors come in two types, one of which will cooperate as long as the exchange partner has done so up to now, even in the last period ('cooperative actors'). Actors do not know each other's type. Non-cooperative actors find it worthwhile to camouflage themselves as cooperative actors almost up to the end of the game. If non-cooperative actors deviate, their exchange partner learns their true type immediately. In that sense they lose their reputation, which constitutes the relation-specific prospective advantage in this model.

However, this clearly does not transport all that there is to the common sense notion of reputation. The latter is centered on the idea of *public* information about an actor: the past behavior of an actor towards exchange partners becomes known to other actors who, when they deliberate a transaction, will take this information into account (see also Charny, 1990, for this definition of the concept). This usually includes the above notion of reputation as an estimate of the characteristics of an actor, but does not logically have to. A reputation for cheating simply means that an actor is publicly known to have cheated before (a qualified number of times?), whether

this is due to special personal traits or not. When I want to clearly distinguish between the two notions of reputation, I will use the term *g-reputation* if I want to refer to the game theoretic usage of the term, and *cs-reputation* for the common sense notion. This common sense notion of reputation leads us to the next section.

5. External Norms: Third Party Control

When third parties administer sanctions, the information and motivation issues already relevant for multilateral second party control gain considerably in importance. In particular the motivation problem becomes more pointed: why should an actor sanction another, usually at least foregoing cooperation benefits in doing so, when the other has not deviated against him? The theoretical answers to these issues are as yet more exploratory than comprehensive.

Consider the contribution of Klein and Leffler (1981) mentioned in Section 4. In its simplest version, all demanders are identical in all respects and the behavior of the supplier is identical towards them. If the supplier cheats, he cheats all demanders and only second-party sanctions occur as a consequence. Nevertheless, it can and has been interpreted as a model of *cs-reputation* in the sense just introduced.

Suppose quality were stochastic (for example, reliability) and consequently not every buyer could observe quality in the period after purchase. Assume that the information transmission problem is solved. Upon receiving the information that quality is poor, a reputational equilibrium of the following kind is self-enforcing, needing no threats to would-be deviators from the punishment path: every demander expects poor quality and is only willing to pay the correspondingly lower price, and the supplier, knowing this, will actually provide poor quality at the lower cost. Since punishment strategies constitute an equilibrium, there is no motivation problem for sanctions to be administered.

Bendor and Mookherjee (1990) also assume that the information problem is solved. They model a multitude of actors engaged in simultaneous repeated bilateral exchanges. The motivation problem is dealt with by assuming a prisoners' dilemma structure on payoffs and calling for the equilibrium of the single shot stage game (the non-cooperative action) to be played as a punishment. Two of their results are worth mentioning: referring to the interpretation of discount factors as reflecting separation probabilities, they state that non-legal sanctions by second parties are sufficient in very stable societies, third-party sanctions are effective at intermediate levels of stability, and in a society with very unstable relationship only legal enforcement can sustain cooperation. Furthermore, for third-party control to be effective, either the payoffs from exchanges with different actors have to influence each other

or they have to differ. If payoffs from exchanges are separable and symmetric, third-party enforcement is ineffective.

Kandori (1992) has tackled the information problem by trying to find minimal requirements for third-party sanctions to be effective. He looks at this question in a random matching game with bilateral exchange: every period, actors are reshuffled into new pairs. Kandori basically confirms the intuition about the role of reputation in such a situation: he finds conditions under which a 'label', determined by the past actions of an actor and known to the player he is matched with at the start of their trading period, is sufficient for cooperation to be sustained. The motivation problem reappears, since Kandori considers general payoff structures. Hirshleifer and Rasmusen (1989) discuss the somewhat related issue of ostracism.

Kandori (1992) and especially Ellison (1994) have analyzed another kind of equilibrium, which does not require any information transmission. Whenever a player has been cheated, he will cheat any other player in the game. In a contagious process, cooperation will eventually break down. This becomes interesting if one assumes a public randomization device (a public 'signal', for example, a campaign for 'moral renewal'). Using this idea, Ellison shows that such a contagious process can be of finite length. This is shown for prisoners' dilemma games and random matching of pairs. In addition, the result does not require 'too patient' players and equilibrium can even be stable in situations where deviations may occur by mistake. We may then find periods of widespread deviation alternating with periods of cooperation in a population.

6. Internal Norms

Internal norms provide first party sanctions. The actor deliberating a deviation from a rule foresees at the same time an internal non-legal sanction in the form of reduced utility. The potential importance of internal norms is fairly obvious. Nevertheless, they have been somewhat disreputable in mainstream economic theory, since their use amounts to explanation via preferences. Economists have been very skeptical about any direct way of obtaining data about preferences and in the absence of data, postulating a 'preference for something' can explain virtually any behavior. However, as survey techniques have become more and more sophisticated in other social sciences and experiments have gained general approval in economics, evidence on preferences can be obtained and tested far more reliably. This has put internal norms back on the research agenda of methodological individualistic theoreticians.

Despite their temporary disrepute, internal norms have very reputable ancestors. No one less than the 'founding father' of modern economics, Adam Smith, has been counted among those who have developed a full blown theory

of internal norms. Elsner (1989) traces Smith's parsimonious theory which builds on the human faculty of being able to put oneself into another person's shoes and on the human desire for approbation from those around him. Along the same lines, McAdams (1995) introduces a theory of status closely connected to internal norms. He argues that the esteem of others as an end in itself is an important motivating force of actors, working both in groups which are close knit and in groups which only share a common observable trait.

Internal norms are closely tied to emotions, the relevant non-legal sanctions being regret, remorse, shame, guilt, embarrassment and the like (see, for example, Frank 1987, 1988; Huang and Wu, 1994; and Elster, 1996). Their role is straightforward if emotions are conceived as a direct sanction for breach of a substantive rule in the sense of Ellikson (1991). Their role, however, may also be important in enforcing second- and third-party non-legal sanctions, if an actor feels guilty, and so on if he does not sanction a deviator. In this context feelings of hatred, vengeance and anger also are important, a subject especially studied by Frank (1988).

Internal norms are also connected to cognitive issues. A comprehensive modern methodologically individualistic approach of human action - recognizing Smithian antecedents - is formulated by Lindenberg (1990). He stresses the role of socially learned 'framing effects': the preferences and the action space available to an actor depend on the way a situation is perceived, 'framed'. This may, for example, explain why opportunities for opportunistic behavior are used differentially in two situations even though 'objective' incentives are the same. Framing effects thus emphasize the conditionality of internal norms (see Section 11 for an application). Even closer to modern social psychology is Schlicht (1997) (Schlicht, 1993 is an earlier condensed version), which also goes well beyond a theory of internal norms, giving an explanation of various forms of rule-guided behavior broadly compatible with the theory of Lindenberg. Based on a fundamental cognitive propensity to perceive the world as governed by regularities, human actors are equipped with a preference for rule-guided behavior, deviation causing discomfort (cognitive dissonance), which requires corrective action. This may serve as a foundation for 'moralistic aggression', the increased likelihood and severity of defense, if a subjectively established moral right has been infringed upon.

Another line of research has focused on the genesis of internal norms. Here evolutionary approaches dominate. Landes and Posner (1978) draw on sociobiological reasoning, while Witt (1986) provides an account combining results from the psychology of learning with elements of evolutionary game theory. The latter is also the base of the recent endeavor of Güth and Kliemt (1994).

C. Applications

7. Family

Comprehensive treatments of the role of non-legal sanctions in stabilizing the family as an institution are Ben-Porath (1980) and Pollak (1985). They integrate both external and internal norms in their analysis, Pollak emphasizing the insuring role of families. Both discuss the pros and cons of the organization of economic activities in families, but Ben-Porath discusses the role of other informal social relationships, especially friendship, too.

Becker, Landes and Michael (1977) consider the idea of relation-specific investments and the costs of finding a new partner in the context of marriage and its dissolution. Note that this application predates the work of Williamson on relation-specific investments and could be regarded as the first application of these ideas. Weitzman (1981a, 1981b), without explicit reference to Becker et al., contain nevertheless the same argument as an important building block of her comprehensive discussion of the social and economic implications of the marriage contract.

Several papers center around the idea of bequests and their manipulation by parents as a non-legal sanction against children. The 'Rotten Kid Theorem' (Becker, 1974, 1981, Chapter 8) shows under which conditions altruistic parents can assure family wealth maximizing behavior by selfish children. Becker and Murphy (1988) analyze public policies on education, old age security, divorce, marriage age, and so on as attempts to correct for defects in the sanctioning mechanism via bequests. Bernheim, Shleifer and Summers (1985) provide a general discussion of non-altruistically motivated parents leaving bequests. Pauly (1990), Zweifel and Strüwe (1994) and Richter (1995) include discussions of the demand for long-term-care insurance if parents desire to manipulate the behavior of children via bequests. Parents may decide rationally not to buy such insurance in order to leave intact the incentives of children to care for them in their old age.

8. Informal Insurance beyond the Family

As already noted, while the family is an important informal insurance institution it is by no means the only one. Other close-knit relationships also provide the basis for such arrangements. In particular, informal insurance in developing economies has attracted considerable attention in recent years. The articles are written in a fairly analytical style without losing sight of the underlying institutional setup. Most of them explicitly discuss non-legal sanctions. Fafchamps (1992), taking up many of the issues raised by Posner

(1980), discusses the institutions of rural areas of developing countries with reference to the formal game-theoretic literature of repeated games emphasizing problems of asymmetric information. The article is nevertheless written in a very accessible style and remains largely informal.

Extending the partly empirical, partly theoretical study by Kimball (1988), Coate and Ravallion (1993) discuss informal insurance as a problem of second party sanctions in a repeated game framework. They discuss the maximum amount of risk-sharing possible in such an arrangement and compare with first best risk-sharing. Both Udry (1994) and Besley and Coate (1995) extend the analysis in the direction of community credit. Udry emphasizes the role played by sanctions imposed by village or family elders, serving a function very much like the formal arbitration procedures in Bernstein (1992) (see Section 11). Empirical results are given from a field study in Nigeria. Besley and Coate emphasize the role of third party sanctions in enforcing repayment in group lending. Again comparisons are made with first best arrangements. Finally Arnott and Stiglitz (1991) began the task of analyzing formal and informal institutions that exist side by side (see also Kranton, 1996b, discussed on p.1171) in the case of insurance arrangements. Their noteworthy result sees informal institutions surviving even if their existence is inefficient.

9. Pre-Legal Societies

Several contributions purport to study the entire system of rules governing a pre-legal society. Posner (1980) is an early and in many ways seminal contribution. He argues that many features of 'primitive societies' can be understood as the consequence of two factors: first, high uncertainty leading to a great need for insurance; and second, the absence of formal insurance due to high information and other transaction costs. The article derives an exceptionally rich picture from this basic argument, discussing a host of institutions and comparing them with modern legal rules. The argument reappears in Posner (1981) Chapters 6 and 7 and is applied to Homeric Greece in Chapter 5. The latter attempt is criticized in Versteeg (1989). Commenting on a historical case study on a New Guinean tribe, Benson (1988) emphasizes the ability of pre-legal societies to marshal change. Friedman (1979) provides a lively account of historical institutions in early medieval Iceland. Pointing out the conditions leading to their gradual decomposition, he also takes a less sanguine view than Benson on the potential of such a system today. Iannaccone (1992) may be useful in understanding the way religious communities close their ranks. Finally, Miller (1993) points out the role that sacred scriptures may play in regulating rituals.

10. Property

Several contributions inquire into the policing and sanctioning of property rights by informal sanctions. Here the well-known study by Ellikson (1991), already heavily referred to in Section 2, provides a prime example. The case study which forms the major part of this monograph studies the norms on cattle trespass in a small, close-knit community, enforced by first-, second- and third-party sanctions. Legal provisions concerning trespass have even been overruled by informal rules. The use of the legal system for regulating motorway accidents involving cattle shows that the legal system is relied upon more frequently if the social distance between the parties of a conflict becomes larger, if the stakes increase, or if costs can be shifted to third parties. Ellikson (1986) and Ellikson (1989) are separate publications based on this material. Also in the field of tort law, Ramseyer (1996) describes the working of the strict liability regime privately operated by some firms in Japan prior to 1995.

Ostrom (1990), a modern classic by any standard, deals with the non-legal, either semi-formal or informal enforcement of property rights in common pool situations. Her account is full of empirical material in field studies from different parts of the world, both successes and failures from the point of view of efficiency. As conditions for success, she identifies among other elements (see pp. 88-104) the involvement of appropriators in monitoring as well as graded sanctions, conditional on the severity and frequency of deviation from the rule. These are mentioned here because they are connected with two noteworthy effects not described so far. Monitoring has a direct private benefit to those involved: they gain information on the state of compliance in the system, which allows them to adopt a strategy of compliance conditional on the state of compliance in the system. In the same vein, sanctioning provides the information to the violator that the sanctioning system is well-functioning. This work has been extended through experimental research published in Ostrom, Gardner and Walker (1992, 1994).

Further work on aspects of non-legal enforcement of property rights are Anderson and Hill (1975), an early analysis of issues related to Ellikson (1991), as well as Benson (1986, 1989b). Finally, Anderson and Swimmer (1997) deliver an empirical analysis of the transaction cost determinants of the property rights regimes of about 40 North American Indian nations.

11. Contract

Both Charny (1990) and Rubin (1993) are comprehensive treatments of the issue of non-legal sanctions in relation to contracts (see also Kronman, 1985 for a somewhat earlier and more limited account). Both are written in an

informal style, the latter being more of a systematization of the contributions up to the time of publication while the former offers more an original synthesis. Charny identifies three 'systems' of non-legal sanctions: third party decision making with reputational enforcement (external norms with formal decision making processes and third-party sanctions); reputational monitoring by market participants (external norms and third-party sanctions); and unilateral decision making (second-party sanctions). Internal norms play a minor but non-negligible role.

The role of formal decision making in non-legal sanctioning is explored in detail in Bernstein (1992) in a case study of the New York diamond trade. Her rich material includes a view on the development of non-legal enforcement embedded in an ethnic group into a more formal structure. The article by Matsumura and Ryser (1995) presents a case study and a model for the Japanese institution of public announcement of default on notes and the sanctioning system built around it. Their contribution is especially noteworthy for analytic consideration of incentive issues concerning the revelation of information. The role of clearing houses, which is central in this system, is also the topic of the historical study by Gorton and Mullineaux (1987) on nineteenth-century commercial banks. Taking a property rights perspective, Pirrong (1995) studies the limits of formal private enforcement in the light of a historical case study on the Chicago Board of Trade. He concludes that unequal distribution of gains may lead to the non-development of efficiency-enhancing institutions. Greif, Milgrom and Weingast (1994) and Milgrom, North and Weingast (1990) are other highly interesting historical case studies on formal medieval institutions backing up non-legal sanctioning mechanisms. The mix of authors makes for good history and good theory. The latter article concentrates on the growth of the 'Law Merchant', the autonomous, international merchant law system which is also studied in Benson (1989a). Benson argues in favor of the efficiency-promoting role of spontaneously evolved systems of rules. The analysis of Schwartz and Scott (1995) provides an antidote to the efficiency view on formal private rulemaking. In an analysis of the 'American Law Institute' and the 'National Conference of Commissioners on Uniform State Laws', two US institutions, they discover evidence of the capture of these institutions by interest groups.

The purely informal norm backed by third-party sanctions has also been dealt with in the area of contracts. Such reputational mechanisms requiring information transmission are most effective in closely knit (business) communities. The seminal paper in this area is Macaulay (1963), which goes well beyond analyzing bilateral relationships, for which it is usually credited. A very early economic study is Cheung (1973), discussing the pricing of the pollination services of bees, explicitly noting the relevance of social norms (p. 30). Allen and Lueck (1992) report on a modern field study concentrating on agricultural contracts. Ramseyer (1991), in an analysis of the Japanese banking industry, cautions against overestimation of the role of reputation and repeated

deals. Basically, business partners do not know whether the opposing party will defect and quit the market or whether it is there to stay. Legal rules, information gathering and formal private policing are used as remedies.

In a brilliant historical study, Greif (1994) has compared the community- and reputation-based enforcement mechanism of a medieval Jewish trader community in Islamic North Africa with the individualistic enforcement mechanism of their Genoese contemporaries combining analytical clarity with a host of interesting institutional issues. A notable result is the likely superiority of the communal system at any moment in time combined with its inferiority in the opening up of new trading areas.

The literature on second-party sanctions based on external norms is large. Concerning contract law, however, as may have become clear already in Section 4, it is largely identical with the literature on relational/long-term contracts which is dealt with in a chapter section in this encyclopedia. The relatively new models of the endogenous determination of the severity of the sanction via exit from and re-formation of relationships have, however, not yet found their way into this literature.

When we leave the framework of purely external norms and take internal sanctions into account, the theory of relational contracts developed by Macneil over the course of the last twenty years is a prime reference. Macneil can take credit for being the first to formulate a theory covering relational contract (which has been acknowledged by writers like Williamson). It has been changing considerably over time. A good, concise statement of its latest stage of development is Macneil (1987), along with Macneil (1983, 1985). The theory stresses the relevance of internalized solidarity and reciprocity norms in ongoing contractual relationships, apart from the disciplining role of other sanctions. His theory is not developed in close contact with economic reasoning and therefore is not always easy to understand from this frame of mind. Lindenberg and de Vos (1985) criticize it from a revisionist rational choice perspective, to which Macneil (1987) replies. Lindenberg (1988) presents a theoretical design of his own applying his 'framing' theory (see Section 6). The approach centers on the idea of 'weak solidarity' in long-lasting contract relationships. While selfish gain-maximization is the main aim, solidarity norms enter the decision as a secondary factor. By way of contrast, the 'strong solidarity' present in close-knit social units like families is characterized by the fulfillment of normative duties as the main aim and selfish aims as a secondary, distracting, factor. Lindenberg argues that 'strong solidarity' frequently is detrimental to contractual relationships.

Several other publications dealing with non-legal sanctions in relation to contracts also implicitly or explicitly refer to both internal and external norms. Experimental work supporting the importance of internal norms in contracts is presented by Hackett (1994). Very interesting work based on anthropological

field studies on trading networks by South-East Asian Chinese is presented in Landa (1979, 1981). (See also Landa, 1983, on the Kula Ring, a classic anthropological example of gift exchange). An onion-like structure of 'relatedness' is described, ranging from the nuclear family to the ethnic group of Hokkien-Chinese to Non-Chinese, associated with declining levels of trustworthiness. The trading practices embedded in these relationships are discussed using information economics and the theory of money. Of particular interest is the borderline between credit and cash transactions. The argument is generalized in Carr and Landa (1983) where religious groups are included and a club-theoretic framework is used. Cooter and Landa (1984) deepen the analysis with respect to the question of the socially vs. privately optimal size of trading groups. They conclude that the socially optimal trading group is smaller than under free entry, but larger than a monopolistic trading group maximizing only the welfare of its members. This and other work has recently been republished in book form (Landa, 1994). While using the early analytical apparatus common at the time, it is nevertheless full of insights. La Croix (1989) builds upon the above work and, using the line of argument of Williamson (1983), discusses the kind of (ethnic, religious, and so on) 'bond' posted in a middleman group.

12. Corporations

Ramseyer (1987) provides an excellent discussion of the role of non-legal sanctions in explaining the relative rareness of hostile takeovers in Japan, embedded in a good general discussion of the role of culture and norms. He argues that the existing norms persist largely due to the fact that they are in line with the underlying economic incentives. Hostile takeovers are relatively unprofitable in Japan since the firms are highly leveraged. Hence banks have a good bargaining position for appropriating any efficiency gains the takeover might produce.

Black and Kraakman (1996) provide an excellent analysis of the possibility to design a self-enforcing corporate law. The aim of the effort is to protect the interests of minority shareholders in the absence of non-legal norms and effective legal enforcement, a situation prevailing especially in some of the former socialist countries. The approach centers on the idea of giving the parties concerned as much direct leverage as possible, minimizing the need for third-party involvement (courts, lawyers, officials, and so on). Core elements are reliance on procedural protection - like transaction approval by outside directors - bright line rules and strong legal remedies on paper which to some extent compensate for weak remedies in fact.

13. Crime and Criminal Enforcement

Felson (1986) provides a detailed account of how non-legal sanctions may support law enforcement. Combining elements of social control, routine activity and rational choice theory, he provides a minimal set-up for non-legal sanctions. A potential offender has to have at least one social contact, the 'intimate handler', whose disapproval affects the potential offender, be it intrinsically or instrumentally. Close kin are usually a case in point. This person has to be contactable by a person who might observe any potential offence, the 'guardian'. Felson then describes how the density of social ties in closely knit, locally concentrated communities provides a multitude of social relationships which can be turned into handler and guardian at any time, significantly lowering crime rates. The more sparsely knit or the more spatially dispersed the web of social contacts is, it is argued, the less effective are non-legal sanctions, causing crime rates to be higher in urban areas. The most recent exercise in tracing social influences on criminality, Glaeser, Sacerdote and Scheinkman (1996), can also be interpreted as modeling the effects of non-legal sanctions on crime rates.

Kunz (1976, 1993) emphasize somewhat different issues. It is asserted that a criminal subculture is stabilized by three elements which serve to reduce the probability and severity of official sanctions in such a subculture: a norm of mutual protection by non-cooperation with official authorities, enforced by non-legal, frequently extra-legal sanctions, and the promise of mutual support in case a member of the subculture has been exposed to legal sanctions

Opp (1989), reconstructing central sociological theories of crime in a rational choice framework, suggests further potential pathways for effects of non-legal sanctions, when discussing the theory of 'differential association'. Day-to-day interactions may influence the kind of norms internalized and thereby alter the subjective costs of committing a crime. Cognitive aspects are also stressed. Systematic differences in the day to day interactions of people may influence their knowledge about opportunities for criminal action or about ways to escape formal sanctions.

When discussing the 'labeling approach', Opp also treats the effects of 'stigma', non-legal disadvantages (that is, sanctions) suffered as a consequence of being convicted, on crime. The criminal career hypothesis maintains that rather than deterring, criminal punishment condones further crime by labeling the actor who committed the crime a 'criminal', stigmatizing him and thus pushing him into a criminal career. Opp points out that this hypothesis could be reconstructed in terms of an economic analysis if one assumes that the stigma accompanying criminal sanctions reduces post-punishment legal opportunities, that is, stigma reduces the opportunity cost of further offences. If stigma leads to more additional crimes due to criminal careers than it deters

by raising the disutility of an offence in the first place, it may actually reduce the deterrent effect rather than increase it. Rasmusen (1996) considers other models of 'stigma'. The models analyze self-enforcing third-party sanctions, are adverse selection and moral hazard driven, and give rise to multiple equilibria. Karpoff and Lott (1993) include an empirical study of the interaction between criminal sanctions and the loss of reputation caused by these sanctions in the case of corporate fraud.

14. Non-Legal Sanctions and Public Policies

Several publications contain discussions of public policies and regulation from a non-legal sanctions perspective. Two questions are central: first, is a particular social norm enforced by non-legal sanctions likely to be efficient? Second, does the state have the means to improve upon a social norm?

The first question has two aspects, which are not always clearly distinguished: it is necessary for an efficient norm to prescribe an efficient behavior, that is, to contain an efficient substantive rule. However, this is not sufficient. In addition the informal enforcement of that behavior via informal first-, second-, or third-party control has to be efficient. If both aspects can be answered affirmatively, no public policy is required. This is the position taken in a public policy centered article by Rock and Wachter (1996). They discuss what they term a norm of 'no-dismissal-without-cause' in the non-union sector of the US economy overriding the legal status of 'employment at will' (Kamiat, 1996 is a critical comment.). In the same vein, Benson (1994), referring to external norms, argues that a large amount of the public activities considered as the provision of public goods could be, and historically have been, privately provided. He presents historical case studies for policing and road maintenance in Britain.

The deviation from efficiency that provides the most straightforward a priori case for state intervention is inefficient informal enforcement of an efficient substantive rule, calling for enforcement by the state. Along this line, Cooter (1996) is probably the most ambitious and systematic attempt to formulate a program of incorporating non-legal norms in law. He proposes to judge the efficiency of non-legal norms by evaluating the structure generating it, using the term 'structural approach' for this endeavor. Rubin (1994), building on his systematic exposition of private enforcement mechanisms (see also Section 11), discusses how governments of the Eastern European transition countries can build upon and support the autonomous development of non-legal sanctioning mechanisms. He favors legal enforcement of arbitration and the adoption of privately generated rules into the law. Giving this view an explanatory twist, Hägg (1994) sees firms demanding regulation and supervision in order to

overcome problems remaining after the various forms of non-legal enforcement elaborated above in Sections 4 and 5 have been exhausted. A technical analysis is combined with some historical evidence.

Besides these rather general treatments, more specific analyses exist. Johnston (1996) analyzes a specific legal question. He discusses the influence of the US merchant law on business norms. Specifically, he looks at the requirement of a written contract for court enforcement of contracts worth more than \$500. He finds evidence that the writing requirement is not complied with in contracts within repeated relationships, where non-legal enforcement is expected to be sufficient. He identifies requirement of written contract whenever this is the relevant business norm as a reasonable reform of the law. E. Posner (1996b) is a critical comment. Epstein (1992a) discusses the use of business customs as evidence of due care in tort cases, arguing in favor of such a presumption in cases where the tort occurs between parties of a voluntary agreement. Epstein (1992b) presents an essentially identical argument in the area of intellectual property. Finally, the discussion of public policy responses to non-legal sanctions in Charny (1990), centered around the problem of information costs and possibly unsophisticated actors in the market, argues in favor of enforcement of the norm that well-informed rational actors would have agreed upon. The general principles derived are applied to detailed problems of US contract law, however, this reviewer feels that the policy discussion is somewhat disconnected from the earlier comprehensive discussion of non-legal sanctions (see Section 11).

Social norms may, however, not always prescribe efficient behavior. If they do not, this calls for corrective interventions rather than enforcement of the norm. Cooter (1996) expects norms to require inefficient conduct if it is possible to externalize costs to third parties or if heavy network externalities are present in norm use. E. Posner (1996a) argues for more general skepticism concerning the efficiency of norms, inefficiencies being especially due to information problems and strategic behavior in norm creation and enforcement. McAdams (1995) proposes an interesting and original theory of racial discrimination based on his status-oriented theory of norms (see Section 6) and looks at the US anti-discrimination laws from this perspective. Epstein (1995) is a critical comment.

Let us now turn to the second fundamental issue. The above contributions are mute on the question of whether beneficial intervention is possible. Intervention, however, may be problematic for several reasons. Striking a classic note, Charny (1996) is skeptical as to whether the evaluation of the efficiency of norms can be undertaken with reasonable accuracy at all given the numerous factors at stake. More fundamentally, state intervention may cause counterproductive changes in the content or enforcement of social norms. In highly original research drawing on psychological material and self-conducted

experiments, Frey (1993a) produces evidence showing that formal incentives may adversely affect internal norms. When a certain kind of behavior which has been sustained by internal norms becomes rational from the point of view of external incentives, for instance because of formal legal sanctions, the internal motivation to act might be crowded out under certain conditions. Whenever this is the case, internal norms and external incentives cannot simply be added, rather they substitute for each other over an initial range. Frey (1993b, 1993c) are applications in the field of the employment relation. Frey (1997) summarizes the entire research project. Chong (1996) provides a related survey of the interactions between incentives stemming from internal norms and other sources.

Concentrating on external norms, E. Posner (1995) is a well written, insightful and comprehensive informal discussion of the various channels through which public policy may influence non-legal sanctioning systems based on game theoretic reasoning. He especially emphasizes the effects of policies on the ability of groups to continue to enforce external norms encouraging cooperation. Various specific policy areas are discussed. Pildes (1996) also discusses various ways in which public policies can undermine efficiency enhancing norms, taking recourse to the concept of 'social capital' developed by Coleman (1990). In a similar vein, Bernstein (1996), in a detailed case study on US merchant law, shows that the policy of adopting 'business norms' into law can change those very norms adversely. Finally, Lindbeck (1995) discusses the effect of the welfare state in the presence of (external and internal) social norms. He argues that the disincentives of the welfare state will be cushioned temporarily by contrary social norms which will, however, be shaped over time by those very disincentives. Both multiple equilibria and vicious circles may result (see also Arnott and Stiglitz, 1991, discussed on p. 14).

More generally, in the presence of social norms stipulating non-legal sanctions, formal legal rules interact with those norms in a complex manner. Levmore (1996) and McAdams (1996) contain comprehensive and well-reasoned discussions of the role and interaction of norms and law in the area of communication. The former discusses the use of anonymous communication as a means to further the frankness of comments, a solution which is frequently dominated by the use of intermediaries. The latter discusses the prohibition of blackmail by criminal law, arguing that the ban is likely to reach a second-best optimum when combined with privacy laws, the benefit of a blackmail ban being essentially the use of information otherwise used for blackmail for public dissemination, leading to non-legal sanctions. Hasen (1996) discusses the relationship between social norms encouraging people to vote in a general election and state laws trying to enforce mandatory voting.

An interesting treatment of the interaction of legal and non-legal rules and sanctions concerning the use of the legal enforcement system, the courts, is

included in Ramseyer and Nakazato (1989) (see also McAdams, 1996). Japanese are frequently said to be reluctant in using the modern legal system since it contradicts traditional norms both in form (publicity of conflict vs. traditional desire for harmony) and substance (universalism vs. traditional particularism). Their empirical findings of Japanese litigation rates related to automobile accidents contradict this by showing behavior in line with maximization of short-term gain. This reviewer, however, finds the identification of 'cultural' influences with irrationality in the early parts of the paper unfortunate. The beginnings of an explanation of the results which is in line with the theoretical structure elaborated in Sections 4 and 5 of this chapter are given in Section 5.

Finally, mandating certain conduct by law may itself create a relationship between law enforcers and the addressees of a law, which can be norm generating. In this vein, McMaster and Sawkins (1996) argue for considering the regulatory relationship itself as a relational contract using the term more or less in the sense of Macneil (see p. 1181).

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