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## Let them take gifts, and cheat those who seek influence

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# Let Them Take Gifts, and Cheat Those Who Seek Influence

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## Abstract

Corrupt arrangements are characterized by a high risk of opportunism. Moreover, denunciation and extortion add another layer of uncertainty for participants in corrupt transactions. This paper demonstrates how legislators can use an asymmetric design of criminal sanctions to amplify these inherent risks, thereby destabilizing corrupt arrangements. It is also shown that asymmetric penalties do not necessarily interfere with the goal of deterrence and that immunity may be a useful tool to disband the ‘pact of silence’ characteristic of corrupt arrangements.

*JEL Classification:* K42, D73

*Keywords:* Corruption, Asymmetric Sanctions, Destabilization, Opportunism, Denunciation, Immunity.

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## 1 Introduction

Corrupt actors must be deterred from their criminal actions. But deterrence involves more than just the threat of suffering from legal sanctions. It encompasses the possibility of being cheated by one's counterpart; besides, deterrence also increases with the risk of being denounced or extorted. These uncertainties can be amplified by designing criminal sanctions in a strategic way, aimed at enhancing opportunism. This paper investigates how differences in criminal sanctions may be exploited by lawmakers to destabilize corrupt arrangements.

We develop a simple game-theoretic approach to determine for which acts corrupt perpetrators should be penalized. At the core of the model lies the idea that partners in a corrupt transaction may cheat each other. They may renege on their promises and denounce a deal after it has been finalized. Unable to rely on legal recourse, corrupt partners face the challenging task of ensuring that each side sticks to the agreement. At the same time they are continuously tempted to betray each other. Such betrayal is a good thing from the point of view of society at large. It assures that corruption is a troublesome business and induces potential participants to refrain from getting involved in corrupt arrangements.

When public officials are paid with counterfeit money, as it recently happened in India, or are given fake antiques, as in China, they can no longer trust to be given "fair" treatment by bribers. The resulting insecurity may effectively deter them from asking for bribes/gifts in the future.<sup>2</sup> Similarly, when corrupt public servants renege on their promises, businesspeople may become less likely to continue with their illegal strategy, [Husted 1994; della Porta and Vanucci 1999; Rose-Ackerman 1999: 91-110; Lambsdorff 2002; Lambsdorff, Schramm and Taube 2005].

Courts reject the enforcement of corrupt agreements, forcing actors to explore alternative safeguard mechanisms against opportunism. They must employ methods to make their agreements self-enforcing. Various forms of institutional solutions come into play and provide guidance to reform. Corrupt parties lacking trust in each other, for example, often use intermediaries. Practical insights into the corrupt dealings of intermediaries have recently been provided, [Aburish 1986; Andvig 1995; Moody-Stuart 1997; Bray 1999, 2004].

Pre-existing social relationships may lay the foundation for economic exchange by providing the required protection from opportunism. Social structure facilitates economic exchange by embedding individuals in long-term (personal) relationships (of trust), [Ogilvie 2004; Greif 2005]. For members of a group, the advantages to be gained from honesty may outweigh the motivation to behave opportunistically or to denounce another member. Social structures and ties may thus facilitate the sealing also of corrupt deals, [Rose-Ackerman 1999: 98; Kingston 2005].

In the course of established ongoing exchanges yet another mechanism to enforce corrupt agreements is at the disposal of business partners. Relationships of mutual trust and respect, formed by repeated legal exchange or hierarchical control, can be misused for striking corrupt agreements. Corrupt transactions may thus be embedded in a broader context of exchange, and legal transactions may act as 'guarantors' for corrupt deals. Once trusted relationships

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<sup>2</sup> See [Herald Tribune 08 March 2002: "One corrupt city shows the plague that afflicts all of China"; The New Zealand Herald 28 March 2002: "It's hard graft when bribes are crooked"; Asia Times 04 April 2002: "Rampant corruption threatened by corruption"].

have emerged and legal threats established, these can be exploited for securing corrupt side-contracts. Consequently, the threat to end legal relationships may effectively prevent opportunism in corrupt arrangements, [Lambsdorff and Teksoz 2005].

To root out corruption, it may be necessary to shatter some of the confidence that goes along with it, i.e. to destroy the trust that corrupt favors will be reciprocated. Fjeldstad and Tungodden [2001] argue that the way customs services were downsized in Tanzania was a failure because those officials who were fired at a later stage became middlemen and created trusted corrupt relationships. After a first crackdown on corruption, corrupt networks revitalized and strengthened, and corruption returned to its original level. Apparently, strategies in fighting corruption may fail if they do not adequately take into consideration network ties and mechanisms that facilitate corruption.

Acts of opportunism or denunciation are not uncommon. In fact, insiders are often a vital source of information for the prosecuting authorities, [Anderson 1995; Rose-Ackerman 1999: 53]. For those who decide to expose the deal miscellaneous motivations exist. For example, the largest company in France, Elf Aquitaine, allegedly setup an internal financial network aimed at providing funding for corrupt political purposes. This so-called “Investment Board” consisted of relatives and friends of the chairman of the board. This institution was well established, and succeeded for a while. Yet the booting out of one member put an end to its operation. The outcast took his revenge, and denounced operations of the network.<sup>3</sup> Clearly, some type of conflict can stimulate one party to take revenge, or to prefer honesty to involvement in illegal transactions.

Another motive for providing information on illegal transactions may also result from monetary inducements by third parties. While prosecutors may offer crown witnesses a reward in exchange for inside information, private agents may also bid on such information, e.g. as a means to regain access to markets lost to corrupt competitors, [Rose-Ackerman 1999: 56]. For the media it is common practice to pay for tip-offs, enabling them to report on political scandals. Crucial information about corruption by Benazir Bhutto and her husband in Pakistan was obtained from a collaborator in London. Pakistani prosecutors obtained these pieces of information in exchange for a payment of US\$ 1 million.<sup>4</sup> As people can profit from obtaining such information for a variety of reasons, and may be willing to pay a price, a market emerges for inside information on corrupt agreements.

That opportunism represents a substantial threat to informal contracting has recently been corroborated by laboratory experiments. In some experiments participants played bribery games or faced problems similar to those explained above, for a comprehensive review see Dušek, Ortmann and Lízal [2004]. Drawing on the gift-exchange literature, Abbink, Irlenbusch and Renner [2000] let two participants hope for reciprocity when exchanging gifts. In case of defection, one of them can spend resources on punishment. Game theory would predict that such punishment would not be carried out because it does not increase the punisher’s income. Expecting that sanctions will not be imposed, the other player would have no incentive to return a gift. This suggests that none of the participants gives gifts in the first place. However, contrary to game-theoretical predictions, retribution is found to be quite common. Reciprocity, though, was less common because a “fair” amount was often not

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<sup>3</sup> See [Rheinischer Merkur 27 November 1997: “Schmutzige Geschäfte”].

<sup>4</sup> See [The Straits Times, Singapur 1 February 1998: “Paper trail points to illicit Bhutto hoard”].

returned. Dušek, Ortmann and Lízal [2004: 5] summarize that “hostile actions are consistently punished while the friendly ones are less consistently rewarded.”

In this paper we shall investigate how legislators may set criminal sanctions to knock corrupt deals off balance. We demonstrate for which element of a corruption offense perpetrators should be penalized in order to foster opportunism and denunciation. We propose the following asymmetric design: expected criminal sanctions for accepting gifts should be low and those for illicitly providing favors high; in turn, expected penalties for giving gifts aimed at achieving influence should be severe (with a provision for leniency), while those for accepting illegal favors mild.

The rationale behind asymmetry in penalties has already been taken up by Rose-Ackerman [1999: 53]: “Successful detection of corruption depends on insiders to report wrongdoing. Often this requires officials to promise leniency to one of the participants.” Yet, in most countries legal sanctions are imposed roughly symmetrically on both gift-givers and takers. We contest this symmetric design and argue that some of the skepticism surrounding asymmetry may not stand up to a careful analysis. Section 2 develops the model and presents the results. Section 3 discusses policy implications in light of the German legal code and their juristic justifications. Section 4 concludes.

## 2 The Model

In the subsequent one-shot game there are two rational, risk-neutral players: a recipient of a gift, e.g. a public official (player “O”), and a gift-giver, e.g. a businessperson (player “F”). O is in the position to place a public contract, award a license or grant a permit whose value for F is denoted by  $V$ .

Because those seeking influence usually have to move first by giving gifts, we assume that opportunistic behavior, i.e. failing to reciprocate, is primarily an option for O. This appears to be the standard sequence, evidenced in most cases of corruption. Sometimes also O may move first, providing favors before being given a gift. F would then have the opportunity to behave opportunistically by failing to give the gift. However, this sequence seems to be the exception rather than the rule. One theoretical justification for our assumption arises when bureaucrats enjoy a monopoly position in placing contracts, awarding licenses or granting permits. Given that businesspeople at times compete for preferential treatment by deploying illegal means, the bureaucrats may easily shift the risk of opportunism to the private sector.

Besides behaving opportunistically, both players may expose the other side. F may be induced to blow the whistle by being offered a considerable monetary payment, coupled, for instance, with the expectation of favorable treatment by a political opposition party coming to power in the aftermath of the corruption scandal. F may also gain from denunciation by sending an unmistakable signal to other government officials that opportunistic behavior on their part will not be tolerated, thereby stabilizing future corrupt deals; or F may just denounce as one mode of retaliation after being cheated by O. We capture the gross payoff accruing to F from denunciation by the term  $D_f$ , with  $D_f \in [\underline{D}_f; \overline{D}_f]$ , and  $\underline{D}_f$  denoting the minimum and  $\overline{D}_f$  denoting the maximum gross payoff. Note, however, that  $D_f$  does not take in legal benefits arising from denunciation, e.g. mitigation of a sentence or immunity. We include these in the respective criminal sanctions.

O, on the other hand, may assume the role of a (fake) *agent provocateur*, soliciting gifts only for the purpose of denunciation. O may also decide to denounce if the gift offered by F is of

too low a value, [della Porta and Vanucci 1999: 195].<sup>5</sup> Additionally, O may be induced to denounce F by receiving a monetary payment or by being promised a lucrative position, e.g. by F's competitors who wish to regain market access; or O may receive a bonus from her superior. O may also blow the whistle in expectation of a payoff resulting from the social standing of being a person of principles, [Lambsdorff 2000: 225], thereby eventually reducing the probability of detection in future corrupt deals. We capture the gross payoff accruing to O from denunciation by the term  $D_o$ , with  $D_o \in [\underline{D}_o; \overline{D}_o]$ , and  $\underline{D}_o$  denoting the minimum and  $\overline{D}_o$  denoting the maximum gross payoff. Note again that  $D_o$  does not entail any payoff that may arise from denunciation, e.g. from mitigation of a sentence or immunity.

In any event, both F and O would have to weigh the benefits from opportunism and denunciation against their potential drawbacks. For example, both players could lose future income from corrupt deals. Moreover, social sanctions may be imposed. That is, possible social ties between O and F might be torn apart; or a social group may penalize the respective player for disobeying the rules of reciprocity, [Kingston 2005]. In our game we focus on these social costs to highlight that the failure to abide by the rules of reciprocity may be socially sanctioned. The costs are captured by the terms  $S_o \geq 0$  (social costs incurred by O) and  $S_f \geq 0$  (social costs incurred by F).

Obviously, legal sanctions also have to be borne in mind. In our game there are four offenses that may be subject to criminal sanctions. O may be punished for illicitly supplying favors to F, denoted by  $S_o^A \geq 0$ . Additionally, O may be penalized for the acceptance of a gift, denoted by  $S_o^B \geq 0$ . Laterally reversed, on F criminal sanctions may be levied for the acceptance of the illicit favor, and for giving a gift, captured by  $S_f^A \geq 0$  and  $S_f^B \geq 0$ , respectively.

We assume that there exist optima  $S^A$  and  $S^B$  for the total criminal sanctions for each fact of a case, i.e.  $S_o^A + S_f^A = S^A$  and  $S_o^B + S_f^B = S^B$ . The respective optimal levels may relate to the risk of detection and the advantage obtained by illegal action, [Rose-Ackerman 1999: 54-55], or to the size of the damage imposed on society, i.e. to the severity of the offense. Since Becker [1968], research has mostly focused on determining the optimal level of these penalties,  $S^A$  and  $S^B$ . We are primarily interested in how a given level of  $S^A$  and  $S^B$  should be divided among perpetrators.

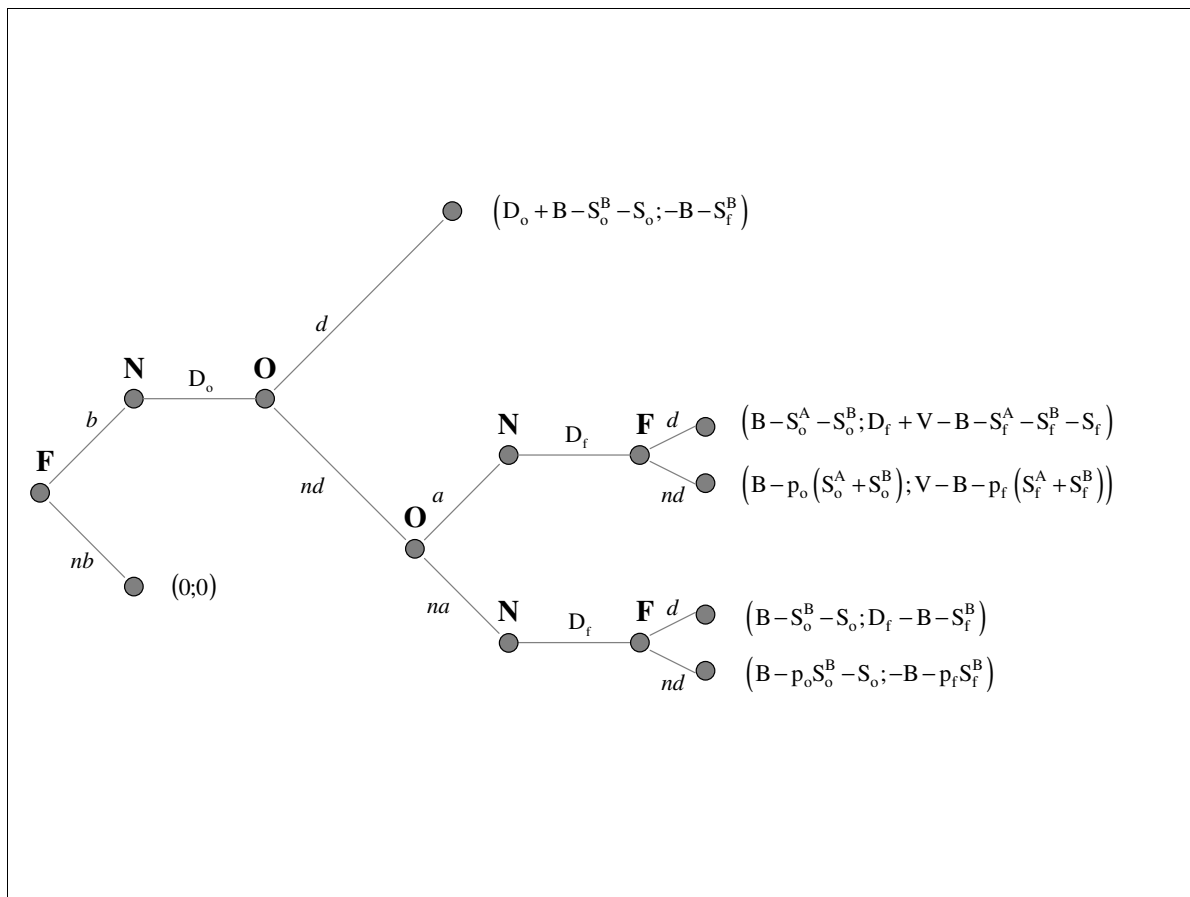
Figure 1 captures the one-shot game in its extensive form, see Kingston [2005: 7] for an extensive-form basic model. At the start of the game, F chooses either to seek influence by giving a gift (action  $b$ ) or to stay out of the corrupt arrangement (action  $nb$ ). In case F gives the gift, nature (N) determines O's gross payoff from denunciation,  $D_o$ .

After nature has determined  $D_o$ , O makes her choice. She decides either to denounce (action  $d$ ) or to remain silent (action  $nd$ ). If O chooses  $d$ , the corrupt arrangement is exposed and O's net payoff is  $D_o + B - S_o^B - S_o$ ; F receives  $-B - S_f^B$ . The game ends. If O decides on  $nd$ , she has the option either to hand out the favor (action  $a$ ) or to renege (action  $na$ ).

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<sup>5</sup> However, in our model setup such a situation cannot occur because the official chooses the type of gift (level of the bribe).





**Figure 1: One-Shot Game and Payoffs (O; F)**

Nature (N) now plays again by “sending out” investigative journalists or members of the opposition party, who provide incentives to F for denunciation. These incentives,  $D_f$ , coupled with the potential profits and losses, determine F’s net payoff.<sup>6</sup> If F blows the whistle (action  $d$ ) after having obtained the favor,  $V$ , he faces both  $S_f^A$  and  $S_f^B$  for sure. We subtract the value of the gift,  $B$ , from F’s payoff and assume that F may additionally incur social costs,  $S_f$ , for his unfair behavior. O, on the other hand, would be punished with certainty for taking gifts,  $S_o^B$ , as well as for illicitly supplying favors,  $S_o^A$ , and must subtract these penalties from the value of the gift,  $B$ . The ensuing net payoffs are  $B - S_o^A - S_o^B$  and  $D_f + V - B - S_f^A - S_f^B - S_f$ .

If F does not denounce (action  $nd$ ), social costs,  $S_f$ , are not incurred and legal penalties are imposed only if the deal were randomly detected with probability  $p_f$ . By the same token, O would face legal penalties only if she were detected. We allow for this probability,  $p_o$ , to differ from that for F, because internationally operating and mobile businesspeople (or firms) may escape prosecution more easily as opposed to locally employed and settled public

<sup>6</sup> We treat  $D_f$  symmetrically both if action  $a$  or  $na$  was chosen by O because, without loss of generality, we assume that the investigative journalists, for instance, do not know which action was taken.

servants.<sup>7</sup> This assumption is immaterial to our results, though. The net payoffs are  $B - p_o(S_o^A + S_o^B)$  and  $V - B - p_f(S_f^A + S_f^B)$ .

If O behaved opportunistically (action *na*), F would face a penalty only for gift-giving,  $S_f^B$ , but not for accepting the favor,  $S_f^A$ , which he did not receive. O would pocket the gift and is punished with certainty only for taking the gift, yet also incurs social costs,  $S_o$ , because of her failure to respect the informal rules of reciprocity. If F denounces (action *d*) the net payoffs are  $B - S_o^B - S_o$  and  $D_f - B - S_f^B$ . If F abstained from denunciation (action *nd*), he would suffer from (1) having given the gift without receiving the favor, and (2) from legal sanctions for gift-giving, imposed with probability  $p_f$ . O would have to endure the corresponding legal punishment with probability  $p_o$  and the social costs,  $S_o$ , with certainty. The ensuing net payoffs are  $B - p_o S_o^B - S_o$  and  $-B - p_f S_f^B$ .

According to the sequence of the game, F's gross (and net) payoff from denunciation is unknown to O at the stage she has to decide between action *a* or *na*. Yet,  $V$ ,  $B$ ,  $S_f^A$ , and  $S_f^B$  are common knowledge.<sup>8</sup> For O information on these parameters is vital to her evaluation of the risk of denunciation on part of F and, thus, to her decisions in the game. If O provides the favor, F prefers to denounce if

$$(1) \quad D_f + V - B - S_f^A - S_f^B - S_f > V - B - p_f(S_f^A + S_f^B) \Leftrightarrow D_f > (1 - p_f)(S_f^A + S_f^B) + S_f,$$

i.e. if the expected net payoff from denunciation is positive. Accordingly, there is a critical value,  $D_{f,a}^* = (1 - p_f)(S_f^A + S_f^B) + S_f$ , that, if exceeded, makes denunciation profitable. O estimates the probability of denunciation,  $\pi$ , based on her knowledge of the distribution of  $D_{f,a}^*$ :

$$(2) \quad \pi = P(D_{f,a}^* \leq D_f \leq \bar{D}_f).$$

In turn, if O does not provide the favor, F prefers to denounce if

$$(3) \quad D_f - B - S_f^B > -B - p_f S_f^B \Leftrightarrow D_f > (1 - p_f) S_f^B.$$

$D_{f,na}^* = (1 - p_f) S_f^B$  represents the critical value if O chooses to renege. Thus, O's estimated risk of denunciation,  $\lambda$ , is

$$(4) \quad \lambda = P(D_{f,na}^* \leq D_f \leq \bar{D}_f).$$

Since  $D_{f,a}^* > D_{f,na}^*$ , one observes that  $\pi < \lambda$ , i.e. the risk of denunciation is lower if O does not behave opportunistically. The reason for this effect is twofold. On the one hand, if F

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<sup>7</sup> Even if the actual probabilities of detection were symmetric, the probabilities of conviction may not be.

<sup>8</sup> Criminal sanctions are common knowledge because they are laid down in the respective legal texts.

denounces in spite of obtaining the favor, he incurs additional social costs,  $S_f$ . On the other hand, F would be criminally liable for the illicit acceptance of the favor, which further reduces the likelihood of denunciation.

Both  $\pi$  and  $\lambda$  enter O's calculation of what to do, i.e. either to provide the favor or not, respectively. O's expected payoff from supplying the favor is

$$\pi(B - S_o^A - S_o^B) + (1 - \pi)(B - p_o(S_o^A + S_o^B)) = B - (\pi + p_o - \pi p_o)(S_o^A + S_o^B).$$

Her expected payoff from reneging is

$$\lambda(B - S_o^B - S_o) + (1 - \lambda)(b - p_o S_o^B - S_o) = B - (\lambda + p_o - \lambda p_o)S_o^B - S_o.$$

Thus, O prefers to provide the return if

$$B - (\pi + p_o - \pi p_o)(S_o^A + S_o^B) > b - (\lambda + p_o - \lambda p_o)S_o^B - S_o,$$

i.e., if

$$(5) \quad (\lambda - \pi)(1 - p_o)S_o^B + S_o > (\pi + p_o - \pi p_o)S_o^A.$$

Observe that  $(\lambda - \pi)(1 - p_o) \geq 0$  and  $(\pi + p_o - \pi p_o) \geq 0$ . Accordingly, both a high  $S_o^A$  and a low  $S_o^B$  induce opportunism. For society at large this is a good thing because it discourages F from gift-giving.

From the perspective of destabilizing corrupt arrangements  $S_o^A$  should thus be high because a public servant who accepts gifts may be effectively deterred from returning the favor if precisely this action is severely penalized. Opportunism would be enhanced due to the uncomfortable choice arising for a public servant after taking gifts.  $S_o^B$ , on the other hand, should be as low as possible. In fact, the elimination of  $S_o^B$ , i.e.  $S_o^B = 0$ , would initiate a strong incentive for officials to behave opportunistically. In contrast, rigorously penalizing an official for accepting gifts may backfire as the corrupt partners may be squeezed into a 'pact of silence' as the official would be placed at the mercy of the businessperson. However, if no criminal sanctions are imposed on the official for taking gifts, the official has ample scope to renege on her promises without fearing denunciation by the businessperson.

An illustrative case how a high  $S_o^B$  may backfire is reported in Lambsdorff [2002: 263]. At a court in the city of Bochum, Germany, an employee of the local road construction authority confessed to accepting bribes for contracts relating to marking roads. Beginning in 1987, and lacking business experience, he passed on names of competing firms in a public tender. After this incident, he received an envelope filled with DM 2.000 (EUR 1.000) from the private firm who obtained the favor. "Suddenly I knew that I had begun to be at his mercy", was the explication given in court and the justification for why he afterwards became entrapped in this corrupt relationship. The minor mistake of the public servant may have allowed to impose on him the criminal sanction  $S_o^B$ . The pending sanction then operated as a guarantee for future corrupt deals.

The case exemplifies that eliminating  $S_o^B$  would give O the chance to get out of the corrupt arrangement by denouncing F without having to fear prosecution – thereby increasing the probability of detection and conviction for F. An asymmetric sanctioning design for the official would therefore lead to a reduced willingness to participate in the corrupt deal on part of the businessperson.

As the right-hand side of inequality (5) indicates, renegeing becomes more likely if  $\lambda - \pi$  is low. But  $\pi$  decreases with  $S_f^A$ , as shown in (1) and (2). Setting  $S_f^A = 0$  thus increases the incentive for O to behave opportunistically. Hence, we posit that the criminal sanction for accepting an illicit favor,  $S_f^A$ , should be eliminated because punishing F for accepting reciprocal favors would backfire. F's willingness to blow the whistle would arise only if he were cheated, and be reduced if he faced severe penalties for accepting the favor. Yet, F should retain his readiness to denounce a deal even if he has already accepted the favor. O, on the other hand, should not be able to lower the risk of whistle-blowing by handing out the favor, because this would stabilize the corrupt arrangement.

What about  $S_f^B$ ? According to inequalities (1) and (3), a high  $S_f^B$  makes denunciation less likely. On the other hand, a high sanction for gift-giving would deter F from participating in the deal in the first place. Hence, there seems to be a trade-off between destabilization on the one hand, and deterrence in its strict legal meaning (i.e. the threat of suffering from legal sanctions) on the other hand. Yet, the authorities can avoid this pitfall by allowing for mitigation of a sentence or outright immunity relating to  $S_f^B$ .

In order to destabilize the corrupt arrangement, exemption from punishment must be granted to F only if O has already supplied the favor. In other words, immunity should result only if O has chosen to award the contract, license or permit – and not if O has fudged on supplying the favor. This would ensure that F could not credibly threaten O that he had better not renege, thereby stabilizing the arrangement. Formally, this differentiation may be incorporated in the model by distinguishing between a penalty levied on F for giving gifts if the favor was provided,  $S_{f,a}^B$ , and a penalty imposed on F if O reneged,  $S_{f,na}^B$ . If we now set  $S_{f,a}^B = 0$ , inequalities (1) and (3) imply that  $\pi$  increases while  $\lambda$  remains unaffected. This, according to (5), would additionally increase the likelihood of opportunism by O.

A further fine-tuning would be achieved if leniency, i.e.  $S_{f,a}^B = 0$ , would be granted only if F actively contributed by denouncing the deal. The regular penalty,  $S_{f,na}^B = S_f^B$ , would instead be imposed in case of random detection. Formally, this can be seen by inserting  $S_f^B = S_{f,a}^B = 0$  into the left-hand side and  $S_{f,a}^B = S_{f,na}^B = S_f^B$  into the right-hand side of inequality (1). (1) changes to

$$(1') \quad D_f + V - B - S_f^B - S_f > V - B - p_f (S_f^A + S_f^B),$$

and F denounces if  $D_f > (1 - p_f)S_f^A - p_f S_f^B + S_f$ . Clearly,  $\pi$  increases while  $\lambda$  remains unchanged (because inequality (3) does not change). As a result, O's incentive to break her promise is amplified because the risk of suffering from criminal sanctions is higher if O decides to abide by the rules of reciprocity than if she does not (see inequality (5)).

Following our statements, we make three propositions.

**Propositions:** *In order to destabilize corrupt arrangements (expected) criminal sanctions should be levied asymmetrically on offenders.*

*Sanctions for illicitly providing favors should be high, whereas those for accepting favors low (zero):  $S_o^A = S_f^A$  and  $S_f^A = 0$ .*

*Sanctions for gift-taking should be low (zero), whereas those for gift-giving severe (with a provision for leniency if the gift-giver denounces that the gift-taker has provided the favor):  $S_o^B = 0$  and  $S_f^B = \begin{cases} S^B \\ 0 \end{cases}$ .*

### 3 Policy Implications – The German Case

In most countries criminal sanctions for bribery tend to be symmetric. One notable exception is Taiwan, where only those taking gifts/bribes are penalized, [Hepkema and Booyesen 1997]. In Germany symmetry – laid out in §§331-334 of the German penal code (*Strafgesetzbuch*) – prevails because law scholars treat the purity of the administrative authorities or the objectivity of governmental decisions as the subject of protection, [Bannenberg 2002: 18-19]. It is argued that both parties in a corrupt deal jeopardize the subject of protection similarly and should thus be punished equally. Such symmetry follows from Article 3 of the German basic law (*Grundgesetz*). Put simply, Article 3 implies that equal facts of a case have to be tied to equal legal consequences, and unequal facts of a case have to be tied to different legal consequences.

However, reasoning that both parties equally interfere with the subject of protection is not indisputable. Indeed, it is only to a minor extent that accepting gifts leads to political harm or economic losses. Rather, it is the act of illicitly handing out favors that endangers society's trust in the integrity of public office, distorts allocative efficiency, or annuls fair competition. Likewise, it is not the willingness to accept illicit favors that distorts decisions in public office, but a gift-giver's initiative to sidestep competition by offering sweeteners. From this perspective, symmetry is not the self-evident and logical consequence. Rather, an asymmetric design of sanctions would be plausible.

It might also be argued that asymmetric sanctions are incompatible with the goal of deterrence because the cancellation of sanctions may reduce the inhibition of criminal behavior by fear of punishment. This objection does not withstand a careful analysis, though. To see why, one has to look at the payoffs if neither denunciation nor opportunism is relevant. In this case O obtains  $B - p_o (S_o^A + S_o^B)$ , while F's expected profit is  $V - B - p_f (S_f^A + S_f^B)$ . As long as the sum of both payoffs is positive, there exists a level for the value of the gift, B, that ensures that each of the two payoffs is positive. Thus, for deterrence to prevail, it is crucial that the sum of the two terms is negative, i.e. that  $V - B - p_f (S_f^A + S_f^B) + B - p_o (S_o^A + S_o^B) < 0$ , which, given that  $S_o^A + S_f^A = S^A$  and  $S_o^B + S_f^B = S^B$ , can be rewritten as  $V - p_f (S^A + S^B) - (p_o - p_f) (S_o^A + S_o^B) < 0$ .

A negative effect of asymmetric penalties on deterrence could only be imagined in rare instances. For instance, setting  $S_o^B = 0$  reduces deterrence if random detection and penalization is more likely for O than for F, i.e. if  $p_o - p_f > 0$ . This adverse outcome could

probably be balanced by increasing  $S_o^A$ . However, detecting the illicit exchange of favors may be more difficult for prosecutors than uncovering the illicit flow of money (gifts). In this situation, which is beyond the construction of our model, the increase in  $S_o^A$  would fall short of bringing about the same effects of deterrence.

With that caveat in mind, the advantageous effect of asymmetric sanctions on inhibiting criminal behavior should be highlighted. Given the risk of denunciation and opportunism, there emerge additional deterrent effects. Gift-givers would be dissuaded from entering corrupt arrangements not only because of expected legal sanctions, but also because public servants are unreliable partners in corrupt transactions. Thus, we are hinting at a broader concept of deterrence, i.e. one that does not exclusively relate to the expected disutility from exposure to legal punishment, as implied for instance in Becker [1968], Polinsky and Shavell [1984; 1999], Posner [1985], Shavell [1987, 1990], and Carlsmith, Darley and Robinson [2002]. In fact, our model suggests that deterrence, in the broader sense of reducing potential perpetrators' willingness to participate in illegal acts, also entails the disincentives created by a specific design of the relevant criminal sanctions. It is this deterrent effect that legal codes can legitimately draw upon by devising criminal sanctions asymmetrically in order to destabilize corrupt arrangements.

In contrast to §371 (1) of the German tax code (*Abgabenordnung des Steuerstrafrechts*; 'corrected return in case of tax evasion'), §§331-334 do not provide for immunity and thus not for active repentance if an offender calls off or denounces a corrupt deal *before* the authorities institute inquiries or uncover the deal. What is more, the attempt, i.e. the "potentially harmful act that does not happen to result in harm" [Shavell 1990: 435], to commit crimes related to §§331-334 makes offenders liable to prosecution according to German adjudication. As a result of both the lack of immunity and the criminalization of attempts, there are no real incentives for perpetrators to exit a corrupt arrangement – as highlighted also by the case of the employee of the local road construction authority in the city of Bochum described earlier.

From a criminological perspective, though, granting immunity in case of active repentance may be reasonable. First, immunity may increase uncertainty and may possibly break the 'pact of silence' characteristic for corrupt arrangements, [Bannenberg 2002: 425]. This result was demonstrated in detail in the previous section. Indeed, the elimination of  $S_o^B$  and  $S_f^A$  in its effect is materially equal to granting immunity, because one ultimately refrains from criminal prosecution in both cases. Second, by the autonomous and voluntary withdrawal of the offender, legal peace<sup>9</sup> may again be reconstituted and further harm avoided, [Bannenberg 2002: 424]. From this perspective the special- and general-preventive necessity to take penal action against offenders actively repenting may not exist, [Bannenberg 2002: 424]. Granted, mitigation of a sentence and outright immunity are often guaranteed by the prosecuting authorities *ex post*. But somebody trying to escape a corrupt arrangement cannot be sure that he will be spared – let alone for which acts he will be pardoned. Thus, what is missing in §§331-334 is the kind of legal *ex ante* certainty guaranteed in §371.

Hence, we propose not only the elimination (or non-prosecution) of some corruption offences, but also anti-corruption laws to be selectively amended by articles providing for immunity. In particular, in order to undermine the trust in reciprocity, we suggest to grant immunity for

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<sup>9</sup> Legal peace refers to the notion that the legal system is not interfered with.

gift-giving,  $S_f^B$ , conditional that the favor (contract, license, permit) has been supplied by the public servant and that the gift-giver denounces this act.

Questions remain about exactly what criminal sanctions and immunity ought to encompass, but also about potential civil litigation and the ensuing indemnifications. May the gift-giver, for instance, retain the illicit favor? Or may the gift-taker keep the gift? Three possibilities arise with regards to the gift-giver, for example. First, F keeps the favor in case of both denunciation and random detection.<sup>10</sup> Second, F loses the favor in case of both denunciation and random detection. Then, obviously, the destabilizing effects described above would decrease, *ceteris paribus*, because F would have to surrender his ill-gotten contract. Formally, this can be seen by looking at how inequality (1) changes. The favor,  $V$ , is taken from F if he denounces; if F chooses not to denounce, he could keep the favor only if he were not detected. Thus,

$$D_f - B - S_f^A - S_f^B - S_f > (1 - p_f)V - B - p_f(S_f^A + S_f^B) \Leftrightarrow D_f > (1 - p_f)(V + S_f^A + S_f^B) + S_f.$$

Since  $(1 - p_f)(V + S_f^A + S_f^B) + S_f > (1 - p_f)(S_f^A + S_f^B) + S_f$ ,  $\pi$  would drop. Still, even under this set of circumstances the asymmetric design of criminal sanction may serve as an encouragement to opportunism and whistle-blowing. The third possibility would be to have F keep the favor only if he denounces. Along the argumentative lines with regards to  $S_f^B$  this option would destabilize the corrupt arrangement (even further).

Yet, allowing the gift-giver to keep the favor is extremely controversial. Imagine, for instance, that a firm provides sub-standard quality in, say, road construction. It would not be in society's interest to have that firm build roads. Similar controversies come about if public servants are allowed to keep the gifts they were given – even though it would enhance their opportunism if they could keep the gift in case they did not award the contract, license or permit. These questions, however, go beyond the scope of this paper, which focuses on the design of criminal sanctions.

## 4 Conclusion

Asymmetric sanctions and immunity increase the risk inherent in corrupt deals because opportunism and denunciation are furthered. As a result, participation becomes less likely. Moreover, given the lack of legal enforcement, transaction costs might increase as more complex and thus costlier safeguard mechanisms have to be sought, [Lambsdorff 2002].

Some caveats have to be borne in mind, though. Foremost, it may be very difficult for prosecutors to establish the link between the favor and the gift, i.e. to prove the *quid pro quo*, because of complex and subtle payment/gift-exchange schemes coupled with long time spans. Imagine, for instance, that prosecutors can prove that a gift has been given, yet cannot connect the gift to a specific favor. Following the aforementioned policy prescriptions, the gift-giver would be penalized for exerting influence on the official; yet the gift-taker would go unpunished. A similarly undesirable outcome would result in the following case. Various firms are bidding for a public contract. The official responsible for awarding the contract

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<sup>10</sup> This is the case in our game, as indicated by the payoffs.

threatens the firm with the best chances to reveal confidential information to its competitors so that these could make a better offer – unless the firm gives her a gift. Again, only the firm/businessperson would be sanctioned since it would be very hard to prove that the contract was placed only because of the gift (the firm/businessperson had the best chances anyway). Both outcomes are detrimental because the gift-taker is not punished for the harm he imposes on society. This issue, however, may be balanced if immunity is given to the gift-giver in exchange for providing evidence that the public servant has reciprocated. The difficulty in establishing the *quid pro quo* would thus be alleviated by the design of our penalties.

While these and other objections against asymmetric sanctions and immunity definitely deserve consideration, others seem to be unjustified. In particular, asymmetry and immunity are not necessarily contrary to the respective laws' subject of protection. Neither is there a conflict with the objective of general prevention. In fact, asymmetric criminal sanctions and immunity might unleash higher deterrent effects of anti-corruption laws, if deterrence is understood in the broader sense of reducing potential perpetrators' willingness to participate in illegal acts. Thus, in order to clamp down more vigorously on corruption, legislators should seriously consider the benefits of asymmetric sanctions and immunity in their (re-) formulation of the respective anti-corruption laws.



## References

- Abbink, K., Irlenbusch, B. and Renner, E. (2000): "The Moonlighting Game", *Journal of Economic Behavior and Organization*, 22, p. 265-277.
- Anderson, A. (1995), "Organized Crime, Mafia and Governments", in Fiorentini, G. and Peltzman, S. (Eds.): "The Economics of Organized Crime", Cambridge, pp. 33-54.
- Bannenberg, B. (2002): "Korruption in Deutschland und ihre strafrechtliche Kontrolle: Eine kriminologisch-strafrechtliche Analyse", Neuwied/Kriftel.
- Becker, G. S. (1968), "Crime and Punishment: An Economic Approach", *Journal of Political Economy*, Vol. 76: 169-217.
- Carlsmith, K. M., Darley, J. M. and Robinson, P. H. (2002): "Why Do We Punish? Deterrence and Just Deserts as Motives for Punishment", *Journal of Personality and Social Psychology*, Vol. 83, No. 2, pp. 284-299.
- della Porta, D. and Vanucci, A. (1999): "Corrupt Exchanges, Actors, Resources and Mechanisms of Political Corruption", New York.
- Dušek, L., Ortmann, A. and Lízal, L. (2004): "Understanding Corruption and Corruptibility through Experiments: A Primer", *Prague Economic Papers*, No. 2.
- Greif, A. (2005): "Institutions and the Path to the Modern Economy: Lessons from Medieval Trade", forthcoming, Cambridge University Press.
- Hepkema, S. and Booyesen, W. (1997), "The Bribery of Public Officials: An IBA Survey," *International Business Lawyer*, October 1997, pp. 415-416, 422.
- Kingston, C. (2005): "Parochial Corruption", forthcoming in *The Journal of Economic Behavior and Organization*, <http://www.amherst.edu/~cgkingston/Parochial.pdf> (downloaded on Nov. 30 2005).
- Lambsdorff, J. Graf, Schramm, M. and Taube, M (2005): "The New Institutional Economics of Corruption: Norms, Trust, and Reciprocity", Routledge, London 2005.
- Lambsdorff, J. Graf and Teksoz, S. U. (2005): "Corrupt Relational Contracting", in Lambsdorff, J. Graf, Schramm, M. and Taube, M. (Eds.): "The New Institutional Economics of Corruption: Norms, Trust, and Reciprocity", Routledge, London 2005.
- Lambsdorff, J. Graf (2002): "Making Corrupt Deals: Contracting in the Shadow of the Law", *Journal of Economic Behavior and Organization*, Vol. 48 (3), pp. 221-241.
- Ogilvie, S. (2004): "The Use and Abuse of Trust: Social Capital and Its Deployment by Early Modern Guilds", CESifo Working Paper No. 1302, Munich.
- Polinsky, M. A. and Shavell, S. (1984): "The Optimal Use of Fines and Imprisonment", *Journal of Public Economics*, Vol. 24 (June 1984), pp. 89-99.
- Polinsky, M. A. and Shavell, S. (1999): "On the Disutility and Discounting of Imprisonment and the Theory of Deterrence", *Journal of Legal Studies*, Vol. XXVIII (June 1999), pp. 1-16.

Posner, R. A. (1985): "An Economic Theory of the Criminal Law," *Columbia Law Review*, Vol. 85 (October 1985), pp. 1193-1231.

Rose-Ackermann, S. (1999): "Corruption and Government. Causes, Consequences and Reform", Cambridge.

Shavell, S. (1987): "The Optimal Use of Nonmonetary Sanctions as a Deterrent", *The American Economic Review*, Vol. 77, No. 4 (September 1987), pp. 584-592.

Shavell, S. (1990): "Deterrence and the Punishment of Attempts", *Journal of Legal Studies*, Vol. XIX (June 1999), pp. 435-466.

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