

# 4200

## LONG-TERM CONTRACTS AND RELATIONAL CONTRACTS

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### Abstract

This chapter discusses the literature on long-term contracts and relational contracts. The central issues in the literature on long-term contracts are the effects of renegotiation and what these contracts can accomplish over and above a series of short-term contracts. The literature on relational contracts focuses on how self-enforceable terms can be supported without the use of enforceable contracts. Among the possible answers to this are repetition and norms.

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### 1. Introduction

For contracts of a non-trivial duration, contract law faces the dilemma of, on the one hand, offering a means of commitment and, on the other, allowing for sufficient flexibility to adjust to changes in the environment. ‘This tension between the need to fix responsibilities at the outset and the need to readjust them over time permeates the long-term contractual relationship’ (Baird, 1990, p. 586). This tension is basic to both long-term and relational contracts.

This entry discussed two classes of contracts, long-term contracts and relational contracts. Although closely related, neither is a subset of the other. Completely state-contingent long-term contracts are clearly not relational. Incomplete long-term contracts would in most cases be relational, although, as pointed out by Eisenberg (1995), they need not be. As regards relational contracts, ‘[t]wo features largely define what lawyers mean by a relational contract: incompleteness and longevity. Relational contracts govern continuing relations’ (Schwartz, 1992b, note 1, p. 271). However, as pointed out in Goetz and Scott (1981) a relational contract need not be a long-term contract, although in most cases it would be.

The two literatures appear to address different issues and hence will be discussed separately below. The central issues in the literature on long-term contracts seems to be the effects or renegotiation as well as what can be accomplished by such contracts over and above what can be achieved by a series of short-term contracts. The literature on relational contracts assume that contract terms are not used and focus on how repeated interaction and social norms can ensure that obligations between parties can become self-enforceable.

### **A. Long-Term Contracts**

#### **2. Long-Term Contracts: General**

Summaries of the literature can be found in Bolton (1990), Hart (1987), Hart and Holmstrom (1987) and most recently in Salanié (1997, chs 6 and 7). For a recent survey focusing solely on labor contracts, see Malcolmson (1997).

Following Salanié (1997, p. 150), a dynamic (long-term) contract is complete if 'all variables that may have an impact on the conditions of the contractual relationship during its whole duration have been taken into account when negotiating and signing the contract'. This definition rules out any unforeseen contingencies which may arise during the duration of the contract. However, it does not rule out asymmetric information. If, for example, the principal can never observe the effort of an agent, the contract cannot stipulate a level of effort. According to the above definition, the contract is still complete if no information of future relevance will become available later on in the life of the contract. Some authors, such as Hart (1995) refer to this as a comprehensive contract, because 'there will never be a need for the parties to revise or renegotiate the contract as the future unfolds' (Hart, 1995, p. 22).

For an early demonstration that long-term complete contracts can enable valuable commitment, see Grout (1984). In the case where complete contracts can be written, full commitment is always valuable, since a contract with full commitment can always mimic the outcome of any other contract with less commitment by committing to the same actions as lead to the outcome for the latter contract, see Salanié (1997, pp. 144-146).

Commitment to a contract can either be broken by a unilateral deviation, namely breach, or multilateral deviation, namely renegotiation. In case of breach, one party has access to the legal system to either enforce the contract or to award damages. When using the legal system is costless, whether breach is actually possible depends on the breach remedies used by the court. If the remedy is specific performance, the contract can only be varied by mutual consent. If, as is more commonly the case, the remedy is expectation damages,

one party can always decide to breach and pay the damages (see Chapter 4600 Contract Remedies: General).

In the case of a multilateral deviation where both parties want to vary the contract term, it is in general not possible to hold the parties to the original contract by legal means. '[B]oth parties' commitments are only as strong as their contracting partners' desire to hold them to their original promises' (Jolls, 1997, p. 203). Since commitment is valuable when complete contracts can be written, losses may occur if renegotiation at any point during the life of the contract cannot be prevented. Although Jolls (1997) does offer some suggestions for enforcing terms which both parties would later agree to vary, it would appear that renegotiation is difficult to rule out legally. This then leads to a focus on contracts which are renegotiation proof (see Dewatripont, 1989 and Bolton, 1990).

One reason why there may be scope for renegotiation is that *ex ante* efficiency may require *ex post* inefficiency. For example, in order to separate out workers with different levels of unobservable productivity, the menu of contracts offered to the workers will generally not imply that all types get their first-best contract. However, once their type has been inferred from their choice of contract, it is (ex post) efficient to renegotiate these contracts. Doing so may make a renegotiated contract of a type *A* worker more attractive for a type *B* worker than the contract which *ex ante* was designed for type *B* and the original menu will no longer be fully separating. Thus removing the *ex post* inefficiencies may remove the incentives which ensured that the contract was *ex ante* efficient.

### 3. Renegotiation

As pointed out among others by Bolton (1990, p. 304) '[i]t turns out that the role of and issues raised by renegotiation are somewhat different when the contracting problem is set in an environment of asymmetric information as opposed to an environment of symmetric but unverifiable information.' The difference between the two cases relates to whether some *ex post* inefficiencies remain when renegotiation is possible.

#### *Asymmetric Information*

For the case of adverse selection, the value of commitment is very clear. Consider a dynamic contract between a principal and an agent, where initially the productivity of the agent is not known to the principal. In any separating equilibrium, the productivity of the agent will be known to the principal after the first period. For the 'bad' type of agent, separation involves a distortion leading to a lower utility in every period of the contract than would be the case if his true type was known. If the true type is really the bad type, the distortion

can be removed after the first period when the agent's type is known for sure. Hence if renegotiation is possible, it will take place - the contract is not robust against renegotiation. Moreover, since both parties want to renegotiate, it is difficult to see how the legal system can prevent this happening. Papers such as Dewatripont (1989) turn the focus on contracts which are renegotiation-proof, that is, contracts where there is never an incentive to renegotiate. With comprehensive contracting this is possible, because any incentive to renegotiate later could have been foreseen at the time of agreeing the original contract. As is shown in Dewatripont (1989), Hart and Tirole (1988), Laffont and Tirole (1987, 1990) the possibility of renegotiation slows down the speed of revelation. Essentially this is caused by a trade-off between speedy revelation and the damaging incentive to renegotiate.

#### *Moral Hazard*

For the case of moral hazard, the literature is less well developed. Fudenberg and Tirole (1990) consider a principal-agent model where there is a gap in time between the agent taking a hidden action and the outcome of this being known. If the principal can infer the agent's action before the outcome is known, a renegotiation which perfectly insures the agent is optimal. However, if the agent realizes this, the incentive structure of the original contract is blunted. As in the case of adverse selection, information revelation has to be slowed down. In the moral hazard case this is achieved by the agent randomizing over its choice of action. The essential lesson from this model is that if renegotiation is possible after effort has been chosen, then the principal cannot make the agent choose the optimal effort for sure. Hence renegotiation again leads to an efficiency loss. Related papers in this area are Chiappori et al. (1994) and Ma (1991).

#### *Symmetric but Unverifiable Information*

Consider a contract on future trade between two parties. Because the information and hence the state of nature is unverifiable by a third party, a contract cannot be conditioned on this state. However, because information is symmetric, any negotiation of the sharing of the surplus in such a state will, given the symmetry of information, be efficient. Problems arise because the *ex post* sharing of the surplus need not be *ex ante* efficient. Contracts which are proof against renegotiation can still improve upon an allocation without any long-term contract by designing the environment of the renegotiation in the unverifiable state. Hart and Moore (1988) show how the *ex ante* contract can be constructed to affect the bargaining power of the two parties *ex post*. However, this literature is not as yet well developed, but other papers in this area are Aghion, Dewatripont and Rey, (1990) and Bolton (1990).

#### **4. Unforeseen Contingencies**

Because unforeseen contingencies may arise during the life of the contractual relationship, there is a need to fill in the consequent gap between obligations. Gap filling in general is discussed in Chapter 4000 (Contract Law). Renegotiation may be valuable as one would expect the contracting parties to be able to fill the gap at a lower cost than a third party, partly because the contracting parties can be assumed to have better information. As in the case of symmetric but unverifiable information, long-term contracts may allow the parties to at least partly design the environment under which the (re)negotiation takes place.

In terms of modeling unforeseen contingencies, there is not as yet an agreed approach. What is clear is that at least for contract issues, simply treating unforeseen contingencies as events which occur with probability zero is not generally appropriate. If the contingency occurs with probability zero, the expected cost of not providing for it in a long-term contract is also zero, and hence the more flexible short-term contract would not appear to offer any advantage due to any unforeseen contingencies. For a survey of the state of the art as well as a discussion of incomplete contracts, see Dekel, Lipman and Rustichini (1998).

The theory of residual control rights, developed in Grossman and Hart (1986) and Hart and Moore (1990), see also Hart (1995), offers one way in which we can approach the problem of modeling unforeseen contingencies. Residual control rights determine who has the right to decide on how a particular asset should be used whenever an unforeseen contingency occurs. Thus even if the actual event cannot be described, rules for who fills in the gap for a particular class of events can be described (see also Kreps, 1990).

In general, in the case of unforeseen contingencies, the ability to renegotiate or put differently, contractual flexibility, may be efficiency enhancing rather than an added constraint.

#### **5. Short-Term vs. Long-Term Contracts**

With asymmetric information, the possibility of renegotiation slows down information revelation. This is equally true in the case where only a series of one-period (or spot) contracts can be signed, an effect known as the ratchet effect (see Freixas, Guesnerie and Tirole, 1985). What are then the fundamental differences between short-term and long-term contracts?

The literature suggests that the performance of long-term contracts may differ from a series of short-term contracts for a number of reasons. The (transaction) costs of negotiating and policing one long-term contract may be lower than negotiating a series of short-term contracts. Long-term contracts

may enable income smoothing if this is not available via credit markets. If renegotiation can be avoided, they also offer better commitment. Informational asymmetry may also favor long-term contracts. For a general discussion, see Hart and Holmstrom (1987).

It is fairly obvious that differences in transaction costs may lead to differences in the performance of long-term and short-term contracts. Not only may the actual costs of writing the contracts be different, but if renegotiation is costly, the commitment aspect of long-term contracts may also be strengthened. This area does not appear to be well developed but see Dye (1985).

In a principal-agent model of asymmetric information Malcomson and Spinnewyn (1988) show that, in the absence of renegotiation, long-term contracts can improve on short-term contracts only if they commit either the principal or agent to a payoff in some future circumstance which is lower than what could be obtained from a short-term contract negotiated if that circumstance occurs. Thus the long-term contract has to have some commitment value in order to be preferred to a series of short-term contracts. Similar results are obtained in Allen (1985).

In the special case where the contracting parties have perfect information, Crawford (1988) shows that short-term contracting distorts investment decisions only when the efficient plan involves mainly sunk cost investment and the relationship plays a consumption smoothing role. In this case the main role for long-term contracts is to serve as a substitute for an efficient credit market.

In a pure moral hazard principal-agent model, Chiappori et al. (1994) demonstrate that two conditions are necessary in order that there is no difference between what can be achieved by an optimal long-term contract and a series of spot contracts. Firstly, the long-term optimum must be renegotiation proof. This reduces the commitment value of a long-term contract. However, this is not sufficient. In addition, the spot contracts should provide efficient consumption smoothing. When the agent does not have access to credit markets, spot contracting does not allow for consumption smoothing and hence spot contracts cannot implement the long-term contract. However, if the agent has access to credit markets and the principal can monitor this, we do get spot implementation, a result also found in Fudenberg, Holmstrom and Milgrom (1990), Malcomson and Spinnewyn (1988) and Rey and Salanié (1990). The case where the agent has access to capital markets but where the access cannot be monitored is more complicated because the spot contract may involve more smoothing than the renegotiation-proof long-term contract.

If consumption smoothing is a strong reason for preferring long-term contracts over short-term contracts, one might expect that in labor markets, the lower the wage, the more likely would be long-term employment contracts. This does not seem to be the case in reality. For this reason, Fudenberg, Holmstrom and Milgrom (1990) assume away any imperfect capital market

influences and focus on problems caused by asymmetric information. They consider long-term contracts that cannot be renegotiated and set out the circumstances under which these have a value above a series of spot contracts or a contract which is renegotiation proof. Due to the asymmetric information, two types of adverse selection, which imply a value to the commitment of a long-term contract, can arise. The first case arises if the preferences of the principal and the agent over future contingent outcomes are not common knowledge. As was noted above, if more information about the agent becomes available over time, there may be scope for renegotiation. The second case arises when the outcome on some date  $t$  conveys information on actions taken by the agent prior to that date. At date  $t$ , the principal, on the basis of this new information, may wish to punish or reward the agent for the past actions. However this is not possible if there is not a binding long-term contract. One of the main contributions of this paper is to make precise when there would be a benefit to ruling out renegotiation.

The existing literature has demonstrated that even if renegotiation cannot be ruled out, long-term contracts may still dominate a series of short-term contracts. At the same time, the benefit of long-term contracts would be much enhanced if renegotiation could be at least limited.

## **6. Empirics**

Despite the huge problems of getting data, a substantial number of empirical studies have considered long-term contracts. A general survey and evaluation can be found in Lyons (1996). An incomplete list of empirical case studies of long-term contracts include among others: Chisholm (1993) (the movie industry), Crocker and Lyon (1994), Crocker and Masten (1988, 1991) and Masten and Crocker (1985) (the design and duration of long-term contractual relationships for natural gas), Galassi (1992) (share contracts in early Renaissance Tuscany), Goldberg (1985a) (aluminium), Goldberg and Erickson (1987) (petroleum coke), Joskow (1985a, 1988, 1990) (contracts between electricity generators and coal suppliers), Lafontaine (1992) (franchising), Lyons (1994) (small subcontractors making specific inputs for customers in the engineering industry), Palay (1984) (rail freight).

## B. Relational Contracts

### 7. Relational Contracts: General

The relational move appears to grow out of the empirical work by Macaulay (1963) with the origin of the term relational contract usually traced to MacNeil (1974). Given the impact of this work, it is surprising how few replications have been carried out to date. The best known of these is Beale and Dugdale (1975), but see also Kenworthy, Macaulay and Rogers (1996) and Esser (1996). The lack of replication is a concern because the modest sample sizes in these studies imply that the results are not generally statistically significant. For example, Macaulay's sample was 68 businessmen and lawyers representing 43 companies and 6 law firms whereas Beale and Dugdale's sample was 33 individuals in 19 firms of engineering manufacturers. Although in both cases the authors are careful to point out the potential weaknesses of their data, studies which rely on their results for motivation are less careful to point this out.

The main empirical observation of relevance to the relational contract literature was that firms within the same industry tended to resort to neither contract terms nor contract law to settle disputes about obligations. Although persuasive, neither Macaulay (1963) nor Beale and Dugdale (1975, p. 47) offer any tests of statistical significance. Beale and Dugdale (1975, p. 47) do offer an insight into when the result did not hold, namely when firms in the sample were transacting with 'outsiders'. 'Firms frequently stated that they would take much greater care when contracting with relatively unknown parties, especially those outside the engineering trade' (Beale and Dugdale, 1975, p. 47). From these studies it would appear that contracts have little relevance where the parties 'knew' each other.

To aid a discussion of the contribution of relational contract scholarship, a clear definition of what is a relational contract would be helpful. However, although several have to date been offered, most of which are discussed in Eisenberg (1995), none appear to be universally accepted. Goetz and Scott (1981) argue that what makes a contract relational is that there are states of the world where obligations cannot *ex ante* be defined. 'A contract is relational to the extent that the parties are incapable of reducing important terms of the arrangement to well-defined obligations. Such definitive obligations may be impractical because of the inability to identify uncertain future conditions or because of inability to characterize complex adaptations adequately even when the contingencies themselves can be identified in advance' (Goetz and Scott, 1981, p. 1091). The central role for the relationship between the contracting parties for the duration of the contract would appear to be the manner in which a gap is filled.

MacNeil, in a series of papers (MacNeil, 1974, 1978, 1981a, 1987a), highlights the importance of two principles of behaviour: solidarity and reciprocity. 'Getting something back for something given neatly releases, or at least reduces, the tension in a creature desiring to be both selfish and social at the same time; and solidarity - a belief in being able to depend on another - permits the projection of reciprocity through time' (MacNeil, 1987a, pp. 274-275). The importance of these have been tested in Kaufmann and Stern (1988), who study how firms react to breach by a trading partner. They demonstrate how firms are initially very forgiving in order to maintain the relationship, but that once they judge that the partner has acted opportunistically, their attitude changes dramatically. For a discussion of this and other empirical work on relational contracts, see Lyons (1996, pp. 45-49).

Relational contract theory can be seen as an attempt to generate a model able to explain when transacting parties do not resort to contracts and by what means they ensure that each party fulfils their obligations. The theory focuses on the relationship between the 'contracting' parties and posits that this leads to cooperation and to implicit obligations being self-enforcing. In the extreme, no formal contract is needed to ensure that all gains from a particular transaction are realized. The theory rests on repeated interaction within a particular well-defined group together with a set of norms governing the behaviour of the group members. Whereas the literature on long-term contracts focuses on the problems which arise because of incompleteness and the potential for renegotiation, the theory of relational contracts focuses on the relationship between the contracting parties which ensures that opportunistic behaviour does not arise. Unless we assume that individuals are naturally cooperative, the next step is to determine how cooperation might emerge anyway.

### **8. Endogenous Cooperation**

One way to understand the observations in Macaulay (1963), as well the attempts to define a relational contract, is as follows. If having the reputation of either keeping to a contract term, or modifying or bargaining to fill a gap in good faith, is sufficiently important (or valuable), the law is not needed to enforce this term. Reputation is valuable either when interacting with the same individual on several occasions or when interacting sequentially with several individuals. In a relational contract, the parties rely on each other to behave in a cooperative manner for the duration of the contract, rather than exploiting any opportunity which may come along. 'Parties who enter contracts desire coordinated, and hence cooperative, actions on the part of their contracting opposites. Therefore, the principal measure of the success of our contract law is whether it in fact induces cooperation' (Baird, 1990, p. 584).

The remainder of this section considers briefly how and when cooperation can occur endogenously among, to follow MacNeil, creatures desiring to be both selfish and social at the same time. The discussion makes clear how norms can play an important role in this theory.

#### *The Folk Theorem and Repeated Games*

Repeated games consider the possibility of achieving cooperation through self-enforcing (possibly tacit) agreements. These are discussed more extensively in Chapter 0550 (Game Theory Applied to Law), see also Baird, Gertner and Picker (1995) and Hirshleifer (1994). Consider a game where the non-cooperative Nash equilibrium is Pareto dominated by another outcome. This is, for example, the case in the Prisoner's Dilemma, or in a game where A must decide whether or not to lend B money and B must subsequently decide whether or not to pay A back. If the parties could write a binding contract, they could clearly implement a better outcome for both. If that is not the case, any (tacit) agreement to cooperate must be self-enforceable.

Repeated interaction may enable cooperation, because of the potential for a current deviation to be punished in the future. For this to work, four conditions must be met. Any deviation must be observable and it must be punishable. This punishment must be credible so that it is clear that when required the punishment will be carried out, and the parties must be patient in the sense that the future matters to them.

The folk theorem for repeated games, loosely speaking, states that if the players are sufficiently patient and the game is repeated for a sufficient number of periods, the players can cooperate to obtain a better outcome than the non-cooperative Nash equilibrium of the one-period game. Put differently, the short-term gain from deviation is more than offset by the present discounted value of the future punishment. The folk theorem generalizes to many different settings. Cases where there are uncertainty, informational asymmetries, differences in the identity of the players, overlapping generations of players and random matching between players can all give rise to folk theorem-type outcomes. Thus, for example, the repeated interaction does not have to be between the same two individuals over time.

In order to cooperate, the parties have to 'agree' on two issues: which cooperative outcome should be supported and which punishment should be used in case of a deviation. Although this agreement could be tacit, when we are talking about contractual relationships it is more natural to think of this as an explicit agreement. Not only are there typically many outcomes which could be supported, but each outcome may also be supportable by many different forms of punishment. Of the latter, the best known are *Tit-for-Tat* (each player in this period does what the other player did in the last period), the *(Grim) Trigger Strategy* (deviation is followed by non-cooperation in all future periods) and

*Stick and Carrot* (severe punishment followed by forgiveness). Because there are many different potential punishments, norms may play a crucial role in selecting which path is used. This is particularly important where the cooperation is between many different individuals over time. If A is willing to cooperate with or trust B because B cooperated with many other individuals in the past it is important that A understands if and when B is being punished. For more on this see Chapter 0780 (Non-legal Sanctions). Thus the theory would predict that cooperation is more likely between fairly homogeneous groups.

There are cases where repetition does not admit cooperation. The most notable case is when the number of periods over which the game is played is finite and known, where the equilibrium of the one-period game is unique and where the exact characteristics of the players are known to all players. In the last period defection will occur because there is no future in which to punish this. But then cooperation in the penultimate period cannot be supported by a combination of a credible promise of cooperation in the last period combined with a threat of defection in the last period as a punishment. Much is made of this in Jolls (1997). However, if just one of the three conditions is violated, cooperation may emerge. If there is an uncertainty about whether this period is the last, then there is still a potential future and hence a future punishment to worry about if a player decides to deviate. If the stage game has multiple equilibria, cooperation may be possible because a credible threat consisting of the 'worst' equilibrium can be issued. If there is some small chance that one of the players is not a rational economic actor at all, but is an irrational type who will cooperate regardless, the rational type may prefer to maintain a reputation for being irrational.

Some of the punishments which supports cooperative outcomes harm both the guilty and the innocent. In such cases, the innocent has an incentive to accept any request for forgiveness, which would destabilize the cooperative agreement as deviations from cooperation are not punished. Although there is no formal contract, this problem is one of renegotiation resembling that encountered in long-term contracts. A social norm entailing punishment for cheaters would clearly support cooperation. On the other hand, a social norm of forgiveness would not.

#### *Relational Contracts and Repeated Games*

Scott (1987b) represents an early, if incomplete, attempt to model long-term contracts as a repeated game. Unfortunately the paper does not fully utilize the then available theory on repeated games. Scott recognises that cooperation may arise without any contracts at all and points out that legal rules can affect both the formation of the contract ('the initial risk allocation') and later adjustments to the contract, but argue that the greater effect is on the initial risk allocation. This effect comes via implied terms and express invocations. Scott highlights

the importance of norms, in particular the norm of 'reciprocity'. The analysis is summarized as follows:

Contracting parties use a mix of legal and extralegal mechanisms, as well as patterned and individualized responses, to ameliorate the information and enforcement deficits that threaten emergent patterns of cooperation. Nevertheless, contractual breakdowns are inevitable. Patterns of cooperation in contractual relationships are inherently unstable, especially where one party is threatened with substantial losses (or tempted with substantial gains). Where necessary adjustments are of lesser magnitude, however, social norms aimed at introducing long-term cooperation will often prompt adjustment, and legal rules provide appropriately remote, but harsh, deterrents and incentives. (Scott, 1987b, p. 2049)

Other attempts to model relational contracts using repeated games are found in Baird (1990), Baird, Gertner and Picker (1995), Campbell and Harris (1993), Hviid (1996, 1998) and, for an example of the use of experimental methods, Hackett (1994).

One insight from the theory of repeated games is that successful cooperation does not necessarily involve observing either deviations or punishments. This does not reduce the importance of the punishment because it is what keeps opportunism in check. Contract law potentially affects the available punishments, their severity and the gains from deviation. Hadfield (1990) notes that in franchise contracts courts consistently fill gaps to the benefit of one side of the contract (the franchisor). This may severely hamper the ability of the franchisor to credibly promise to act in good faith. Contract terms also affect the ability to punish. The severity of the punishment can be increased by leaving the contract more incomplete than necessary (see Bernheim and Whinston, 1998; Hviid, 1998). Other examples are terms implying expensive third-party arbitration, rights to terminate the contract (for example, franchises), or demands of performance under the contract. All these terms can make non-cooperative behaviour potentially costly. Thus contract law and contract terms may matter even in relational contracts which are substantially relying on self-enforceable agreements and where the law is not seen to be used.

Repetition may not in itself be sufficient to ensure cooperation. In some cases this depends on the available institutions. An interesting combination of repeated games and institutional design as a means to overcome incentives for short-term opportunistic behaviour is found in Greif, Milgrom and Weingast, (1994). They model the emergence of merchant guilds in the late medieval period as a response to the incentives of the ruler of a trade centre to opportunistically appropriate rents from some of the traders. In their model repetition as such is insufficient to ensure cooperative behaviour by a ruler because the ruler can abuse individual traders, whose threat of punishing the

ruler by staying away from the centre is non-credible if most of the other relevant traders do not know about the abuse and hence continue to use the trading centre. Strong merchant guilds can credibly initiate a collective punishment (a boycott for a given period) by coordinating the actions of its members. One relevant lesson for relational contract theory is that institutions may still matter. Moreover, the institution of the guild had an effect even if a boycott was never observed in the same way that legal institutions may have an effect even if they are never seen to be active.

Finally, what might on the face of it appear to be a mixture of relational and written contracts has been considered in Klein (1996), who argues that court enforcement and private enforcement need not be alternative contract enforcement mechanisms, but may be complements. The former may on its own generate too much rigidity, making it possible for one party to 'hold-up' the other when conditions change radically (one has to think of such radical changes as being insufficient to excuse performance, but radical enough that they were not covered by the original contract). The latter generates too much flexibility.

The idea of Klein (1996) is that private enforcement creates a range of self-enforcement. So long as the change to the environment does not place the gains from a hold-up outside what can be negated by private punishment, the hold-up will not occur. Court-enforceable contract terms can be used to change this range, either by extending it, by shifting it, or by affecting the probability distribution over the value of a hold-up. It is in this way that court and private enforcement becomes complementary.

It is worth noting that unless the definition of a relational contract is weakened, it does not seem that the framework in Klein (1996) provides an economic justification for relational contracts since the contract terms which have been agreed must be enforced, that is, there is nothing relational about that part of the contract. Moreover, if the courts fail to enforce the terms of a contract literally, then this may paradoxically create more scope for hold-ups.

## **9. Concluding Remarks**

The impact of the relational contract theory on the economic literature on incomplete long-term contracts as well as mainstream law appears to date to have been relatively modest. This may partly be because 'it is impossible to locate, in the relational-contract literature, a definition that adequately distinguishes relational and non-relational contracts in a legally operational way - that is, in a way that carves out a set of special well-specified contracts for treatment under special well-specified rules' (Eisenberg, 1995, p. 291; see also Craswell and Schwartz, 1994, p. 199). If this is not the case, there appears little point to making the distinction and given the lack of a common jargon

between economics and law, it is not clear what would be achieved by relabelling contracts. The main contribution of the relational contract theory so far would appear to be to highlight the potential importance of the relationship between the contracting parties and the social groups to which these belong, including the importance of norms and non-legal sanctions.

However, the success or failure of transacting does not solely depend on the relationship between the contracting parties, because contracts also play a significant role. A fruitful way to look at contracts would be as a combination of legally enforceable and self-enforceable obligations. This recognises that whereas some obligations need to be self-enforceable because third parties cannot verify the facts giving rise to a particular obligation, others need to be self-enforceable because of the (transactions) space costs of using the legal system. Moreover, in order to cope with unforeseen contingencies, the parties may either rely on each other to handle the new situation in good faith, or, by using the contract to allocate residual control rights, place the onus on a particular party. The paper by Klein (1996) is a promising step in that direction, offering the possibility of a more balanced view between incomplete contract theory and relational contract theory.

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