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## Territoriality of Law and the International Trade Game: Towards a New Institutional Economics of International Transactions

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# **Territoriality of Law and the International Trade Game: Towards a New Institutional Economics of International Transactions**

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*CSLE Discussion Paper 2006-06*

**Abstract:** The conventional theory of international trade is dominated by a model presupposing a legal order that is perfect in its specifications and controllability, binding for all economic agents, no matter their nationality. World order appears to be cosmopolitan in the sense of Kant. An international private law community such as this, however, does not exist. In fact, there is a multitude of legal orders and a territoriality of law, leading to problems largely neglected in the traditional theory of international trade. They are at the heart of what we would like to call the New Institutional Economics of International Transactions (NIEIT) – a research program which started from a monograph published in 1990 (see Schmidt-Trenz 1990).

This paper addresses two questions:

- (1) Which specific problems emerge in contracts and the contracting process because of factors such as the multitude of legal orders and the territoriality of law?
- (2) What solutions are there to these problems a) on the level of the law, and b) in the shadow of the law or completely independent of it (“private ordering”)? How do they work from an efficiency point of view?

We restrict attention to the international exchange of goods. However, the insights gained can be transferred to other types of transactions, such as international finance transactions, direct investment, and investment agreements.

JEL classification: F02, F15, K33

**Keywords:** conflict of law, international private law, transaction costs, enforcement of judgements, private ordering

## I. Introduction

From the beginning, the New Institutional Economics (NIE) has been concerned with a lacuna in orthodox economics – the prevailing attitude of ignoring the role of institutions required to capture the gains from trade (see Richter [2005]). Although it would certainly be incorrect to say that traditional analysis completely abstracts from institutional structures, “there can be little doubt that the usual treatment of institutions was superficial. The existence of political, legal, monetary, and other systems was certainly recognized; but either these systems were regarded as neutral in their effect on economic events and ignored, or they were taken as given and then specified in so perfunctory a way as to suggest that institutional influence was not of much importance” (Furubotn and Richter [1991, p. 2]). With regard to state law, the conventional economic theory did not underestimate its role as an institution of governance, but it took the existence of a well-functioning institution of state law for granted (see Dixit [2004, p. 3]); despite the fact, that in “all countries through much of their history, the apparatus of state law was very costly, slow, unreliable, biased, corrupt, weak, or simply absent” (Dixit [2004, p. 3]).

Although the New Institutional Economics has meanwhile grown out of its infancy, it has surprisingly neglected to deal more closely with a lacuna that looms particularly large – the study of international trade (see Yarbrough and Yarbrough [1994]). With the exception of the theory of multinational firms the orthodox theory of international trade has widely neglected that institutions do matter. An elementary legal order is implied in the models, but it is not the subject of analysis. The fact that legal differences are also economically relevant is - at best - stated, but it has not yet become an object of investigation. Most of the literature is concerned with the movement of goods across borders. A serious analysis of the international *transaction* as the elementary unit of economic research is still missing, so that the traditional theory of international trade can duly be spoken of as “astronomy of the movements of goods” (Boulding [1958, p. 32] calls it “a universe of commodities”).<sup>1</sup> Moreover, all the determinants of the pattern of

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<sup>1</sup> The fruitfulness of this procedure is not disputed here. But there are costs to it. The Law and Economics of private ordering has been pushed into the background because the analysis was facilitated by the

trade (factor endowments, technologies, preferences, heterogeneous products and other market imperfections) mentioned in the so-called theory of “international” trade are factors that work for trade between different regions of a nation state as well. Hence, this theory deals with a special case of the regional division of labor but hardly identifies any truly international dimension.

The problems can best be described in the terminology of property-rights analysis. Economic transactions consist of an exchange of property rights. While for domestic transactions the legal foundations and their enforcement through the “protective state” (see Buchanan [1975, p. 68]) are unequivocal, international transactions touch a multitude of legal systems and the monopoly of power claimed by each state within its boundaries (territoriality of law). Collisions of norms and gaps between different legal systems appear, concurring court decisions is often coincidental, and the assistance of the judicial and penal institutions in foreign countries is not at all a matter of course. Thus, because of the absence of a world state, the property rights of economic agents involved in international trade are often incompatibly defined and insufficiently protected.

Consider the following example: In the autumn of 1981, a Cairo-based company agreed to purchase a number of second-hand vehicles from a Belgian exporter. He introduced a German shipping agent, who received a Letter of Credit and made out a Bill of Lading on the form of a bankrupt Middle Eastern shipping company. These documents were presented to a bank in Zurich and immediate payment was made. However, the cars never arrived ... (ICC [1986, p. 6]). Actually, things were much more complex; legal battles blazed. As several legal orders were involved, it was unclear which law was appropriate. Taking the territoriality of law as given, one might conclude that international transactions, at least when activities are not simultaneous, as they usually are, do not come about at all. No international trader can be sure to get a return for what he has given up in advance. It seems as if there were almost no sanctions to ensure the success of such transactions. That raises the question: how is it that private international transactions do take place in spite of these unfavorable conditions?

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assumption of a perfect legal order. A division of labor has developed: Economists have been preoccupied with the benefits of specialization and exchange, while legal scholars have been focusing on the contractual ramifications. The New Institutional Economics of International Transactions can be judged as an attempt to reduce these costs.

Our answer is that the increase in international transactions is not so much owing to the influence of consciously cooperating governments – international constitutional policy – leading to some sort of worldwide “legal centralism”.<sup>2</sup> It is rather thanks to spontaneous forces that an almost complete self-regulation of this area of economic life has resulted, based on “private ordering”.<sup>3</sup> The large number of institutions spontaneously created “by the economy” gives ample witness of this development. The evolution of the *Lex Mercatoria*, the multinational firm, the Incoterms and the information services provided by the International Chamber of Commerce (ICC) may serve as evidence here.<sup>4</sup> This distinction between “private ordering” on the one hand and “legal centralism” on the other is crucial, although any real order usually rests upon some mixture of both (see Epstein [2004], Kadens [2004], Donahue Jr. [2004]). In the international arena, this mixture tends towards private ordering.

The NIEIT concentrates on the international aspects of private law, as opposed to international public law.<sup>5</sup> It has so far dealt with the multitude of legal orders and the territoriality of law by attempting to answer the following four questions (see Schmidt-Trenz [1990]):

1. How can the fragmentation of legislation in various legal systems throughout the world be explained? What is the optimal number of states?
2. Why are states territorially organized? How can the existence of state boundaries be explained and where should the boundaries be drawn to maximize wealth? (The question of optimal legal areas.)
3. Which specific problems emerge in contracts and the contracting process because of factors such as the multitude of legal orders and the territoriality of law?

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<sup>2</sup> This term reflects “the view that the justice to which we seek access is a product that is produced – or at least distributed – exclusively by the state” (Galanter [1981, p. 1]). Williamson describes the views of “legal centralism” as follows: “Most studies of exchange assume that there are efficacious rules of law regarding contract disputes and these are applied by the courts in an informed, sophisticated, and low cost way” (Williamson [1984, p. 208]).

<sup>3</sup> This expression refers to self-help and agreement on rules for settling disputes that could otherwise be brought to court (see Eisenberg [1976]; Galanter [1981, p. 8, 23]; Williamson [1984, p. 208]).

<sup>4</sup> Berman [1983], Trakman [1983] and Benson [1989] give further examples.

<sup>5</sup> Public International Law is one of the subjects covered by the so-called “International Political Economy” (see Sandler [1980, p. 12]). Following the tradition of the Public Choice Paradigm, this school of thought examines how the “productive state” in Buchanan’s (Buchanan [1975]) sense behaves in international affairs. This topic is now well established in economics. This is something, however, that cannot be said of the international aspects of private law.

4. What solutions are there to these problems

- (a) on the level of the law,
- (b) in the shadow of the law or completely independent of it (“private ordering”)?

How do they work from an efficiency point of view, thereby focusing on both property-rights structures and transaction costs?

In this article, we will deal with points (3) and (4) (for points (1) and (2) see Schmidt-Trenz/Schmidtchen 2002). We restrict attention to the international exchange of goods. However, the insights gained can be transferred to other types of transactions, such as international finance transactions, direct investment, and investment agreements.

The article is organized as follows: The second section clarifies the building blocks of the NIEIT. The connection between the fragmentation of law, the territoriality of law and constitutional uncertainty, which is classified as the source of transaction costs in international transactions, is examined in this section. In the third section, an international transaction is modeled as a strategic game and identified as an international trade dilemma. The fourth section deals with possible ways to overcome international trade dilemmas. Finally, section five provides a summary and some further reflections.

A final remark with regard to the relationship between the conventional theory and the New Institutional Economics seems adequate. As Furubotn and Richter put it: New Institutional Economics “should not be considered as being a deliberated attempt to set up a new and distinct type of doctrine in conflict with conventional theory”; rather, it is sensitive to institutional issues and “seeks to extend the range of applicability of neoclassical theory by considering how property-rights structures and transaction costs affect incentives and economic behavior” (Furubotn and Richter [1991, p. 1]).

## **II. Building Blocks of New Institutional Economics of International Transactions**

### ***1. Transactions as the Elementary Unit of Analysis***

In contrast to conventional economics, the New Institutional Economics emphasizes the transaction as the elementary unit of analysis (“the institutional economics imperative”): “The transaction, rather than a good or service, is regarded as the basic unit of analysis,

the dimensions of which are essential to pattern recognition and to efforts of economizing” (Williamson [1986, p. 151]). In addition, New Institutional Economics “seeks to demonstrate that institutions truly matter. Each distinct organizational structure is said to affect incentives and behavior but, beyond this, institutions are themselves regarded as legitimate objects of economic analysis” (Furubotn and Richter [1991, p. 2]). Following North [1989, p. 239] an institution consists, basically, of informal constraints, formal rules, and the enforcement characteristics of both that govern and shape the interactions of human beings and organizations, in part by helping them to form expectations of what others will do. The term transaction refers to economic activities and interactions with the potential to create or add value, such as the exchange of goods or services, reputation and goodwill. The activities require input from several individuals and the interactions are based on explicit or implicit contracts voluntarily made by all the parties involved. Typically, these contracts are incomplete.

In most transactions participants have at their disposal “various actions that increase their own gain, while lowering the others’ gain by a greater amount” (Dixit [2004, p. 1]). For this whole class of actions Williamson coined the term opportunism.

Many transactions involve the acquisition or transfer of property rights. Therefore, New Institutional Economics focuses on the institution of property rights and on the system of norms governing the acquisition or transfer of property rights (see Furubotn and Richter [1991, p. 3]). Since the creation, utilization, and support of an institution governing a transaction requires real resources – transaction costs – serious attention has to be given to the role these costs play in the organization of economic activities.

The confluence of several factors characterizes the subject matter of transaction cost economics, which is a central part of NIE (see Kreps [2004, pp. 594-599]):

- “1. Many important transactions are complex in a variety of ways. They take time to complete, with the parties to the transactions having multiple opportunities to act. They often involve uncertainty, hidden information, and moral hazard.
2. The parties to these transactions are unable, either at the outset or during the transaction, to imagine all the possible contingencies that may arise or the consequences of those contingencies that they do imagine ...

3. Both at the outset and as the transaction unfolds, the ultimate terms of the transaction are unclear. These terms are worked out as time passes and contingencies arise ...
4. To say all this is not to say that the parties enter the transaction blindly. They may be quite sophisticated in their attempts to structure the transaction in a way that is likely to lead to efficient adaptation ...
5. Parties to the transaction-relationship, in varying degrees, are increasingly held hostage by their trading partners, as time passes and the transaction-relationship matures ... the parties to the transaction develop *transaction specific assets* that are of value only in this transaction and would be lost if the transaction ends prematurely.
6. To the extent that this is true, a party with transaction-specific assets at risk is potentially the victim of a *holdup* of the other side.”

Given conditions 1. – 3. the transaction is incomplete:

“7. Essential to any incomplete transaction where the parties have transaction-specific assets at risk are the rules, conventions and procedures by which the terms of the transaction are adapted to contingencies that arise. Those rules, conventions, and procedures typically mix legal rights, contractual terms, and custom to varying degrees. Those rules – in the jargon, the *governance of the transaction* – are what makes one transaction efficient and another hopelessly inefficient” (Kreps [2004, p. 599]).

## ***2. The Diversity and Territoriality of Law***

From an economic standpoint, a system of private law serves to fulfill two fundamental functions, which Kronman referred to as possessive security and transactional security (Kronman [1985]). Possessive security is established when (1) the property rights which “specify the norms of behavior with respect to things that each person must observe in his interactions with other persons, or bear the costs of nonobservance” (Furubotn and Richter [1991, p. 2]) are unambiguously defined and assigned to persons, and (2) these rights are protected by “guarantees based on sanctions that are established either by law



or by custom” (Furubotn and Richter [1991, p. 2]).<sup>6</sup> Transactional security is ensured when the parties to a transaction can reasonably expect that the transaction will be executed as promised.

A state’s monopoly of power fundamentally guarantees possessive security on its own territory and transactional security in domestic transactions. International transactions, however, come into contact with more than one legal system, and therefore also with more than one state’s associated monopoly of power. In this context, lawyers suggest making a distinction between three levels:

- (1) **The Capacity to create Law:** A lawmaker can only draft valid law for his territory. The legal catchphrase is: Scope of law (= the territorially limited validity of law); jurisdiction to prescribe.
- (2) **The Application of Law:** The applicable private law is defined by the conflict-of-law-rules, also called Private International Law (PIL). Courts can apply the private law of a foreign country. Thus, the applicability of a particular private law is not limited territorially. Note, however, that as of today, almost every nation provides for its own conflict-of-law-rules. Thus, we even have to deal with collisions of collision rules.
- (3) **The Execution of Judgements:** Judgements are acts of state. The direct effects of these judgements end on national borders. To be able to have an effect outside of the state they are issued in, the cooperation of foreign countries is required. This is the level at which the recognition and enforceability of foreign judgements comes into play.

In short, the capacity to create law and the direct effect of judgements are territorial, while the application of private law is not. Both territorial points pertain directly to the sovereignty of states. Since Savigny, however, states consider matters of sovereignty less important when it comes to the application of law. In this way, PIL overrides territoriality.

PIL is a law of conflict; a law over laws, a second level law, or a meta-law that determines which law to implement when a trade relationship involves more than one

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<sup>6</sup> Included are forms of „private ordering“ by which individuals try to overcome opportunistic behavior (see Furubotn and Richter [1991, pp. 21-22]).

legal system (see Mankowski [2002, p. 118]). Along with PIL, International Procedural Law plays a central role. It governs, among other things, the following aspects: “(1) The international competence of courts: Which state’s courts are allowed to make decisions? Or from the point of view of the appealed court: Are the courts of my state allowed to decide at all? (2) The recognition and enforcement of foreign judgements ... Can a legal title be executed in a foreign country? (3) The processing of writs in a foreign country... (4) The differences in courts granting legal aid, especially as regards their willingness to take evidence: Can one count on the assistance of local courts when having to collect evidence in a foreign country?” (Mankowski [2002, pp. 118 f.] Translation from German.)

### ***3. Constitutional Uncertainty as a Source of Transaction Costs***

Due to the absence of a world-wide protective state, it is common for the property rights of economic agents involved in foreign trade to be incompatibly defined and inadequately protected. For this reason, a specific form of uncertainty in the domain of private foreign trade relationships emerges, which is called constitutional uncertainty (see Schmidt-Trenz and Schmidtchen [1991]). This is an uncertainty that plays a role in the execution of both complete and incomplete contracts. Complete contracts determine not only the behavior of the involved parties in any state of the world, but also which law the contract is subject to, and which court should have jurisdiction. But even if the contract is complete in this respect, uncertainty concerning the applicable law remains. Incidentally, the law chosen by the contract parties and the decision of the court could conflict with each other. The reason is that the laws applied by the court could mandate that transactions with foreign contacts will follow a certain PIL. This PIL can, however, require the use of a different applicable law than the one the parties have chosen. If the contract contains no rules pertaining to applicable law, the applicable PIL is first determined by International Procedural Law. In applying the PIL thus determined, the applicable law is established. If a judgement is to be enforced and the defendant no longer has assets in the country where the judgement was made, then the problem of recognition and enforcement abroad

emerges. It becomes obvious that constitutional uncertainty creates contracting problems that are reflected by transaction costs for international economic actors.

According to the view presented here, constitutional uncertainty can be traced back to problems in rendering and executing judgements – two problems that do not arise in this form in the domestic economy.<sup>7</sup> Also the so-called sovereignty risk, for instance in the form of risks of expropriation and repudiation (see Schnitzer [2002]; general Herring [1984]), are a part of constitutional uncertainty.

It should be mentioned that uncertainty and risks are indeed discussed in foreign trade literature, however this literature does not deal with what we call constitutional uncertainty. The starting point of the mentioned approaches is the idea that “the structure of foreign trade is affected by random shocks that originate from various sources” (Helpman [1985, p. 72]). As Pomery [1984, p. 420] aptly put it: Uncertainty is “imposed, as a model-exogenous datum, on preferences, technology or endowments.” The same applies to price fluctuation.

#### ***4. Institutional Alternatives in Foreign Trade***

There is a continuum of possible institutional alternatives in international trade: the classical contract of sale on the one side and the foundation of subsidiaries abroad on the other, be it as an independent company with an assembly/subassembly or manufacturing plant or be it as a trading company.

There are also plenty of intermediate forms of contractual organization which are used in international trade, amongst which are license contracts (licensing), franchising,

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<sup>7</sup> The relevance of this factor may be demonstrated by a recent example: foreign trade with China. German foreign trade firms frequently complain about unreliable Chinese business partners: “The states of mind of the firms involved in trade with China meanwhile reach from sheer anger to utter despair.” So the comment by an important Hamburg foreign trade corporation reported in a newspaper (Frankfurter Allgemeine Zeitung, No 237: 13; 10. 11. 1988). The report continues: “Even small deviations in the bills of delivery induce the Chinese buyers to refuse to honor the bills submitted against letters of credit. The merchandise is then paid a long time after its arrival – often only on the condition of massive concessions as for prices. Since it is only with high cost – if at all – that it can be shipped back, the German exporter is ‘actually exposed to pure blackmail’. The spokesman of the firm concerned speaks of a ‘partly lawless situation’ (...). A workable commercial legislation does not exist and thus there is no imperative need to fulfil a contract.” Ibid. Especially characteristic – and that may hold as an additional proof of our proposition – is what kind of firms show opportunistic behavior in China. It does not refer to the old and

contractual production etc. – i.e. “joint ventures entered into with a partner abroad” (Walsh [1971, p. 70]). The term “joint venture” is thus understood in a broad sense as “a type of association which implies collaboration for more than a very transitory period” (Friedman and Kalmanoff [1981, p. 6]).

In order to assess the degree of internationalization of a firm structure we refer to the relative amount of capital and management services invested abroad. This leads us to a classification scheme as shown in fig. 1 (see Meissner [1987, p. 47], with slight modifications).

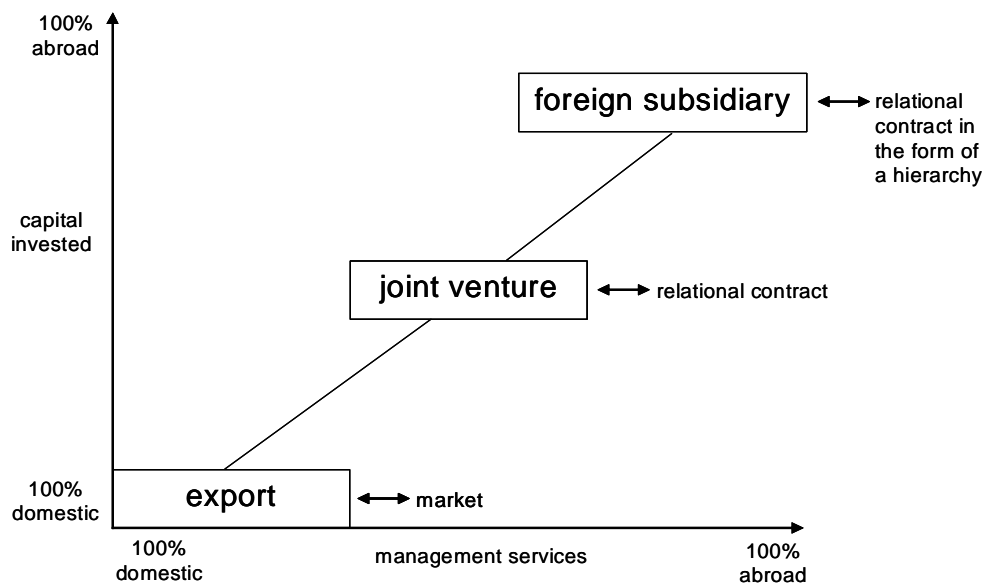


Fig. 1: International institutional structures

These institutional alternatives for doing international business find their NIE pendant in well-discussed governance structures:

1. market (exports/imports),
2. relational contract (“joint venture” in a broad sense),
3. hierarchy (subsidiaries).

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large Chinese foreign trade corporations, but is rather a matter of the innumerable new companies founded in the provinces and cities.

Evidently, figure 1 does not offer but a very rough differentiation. A more precise analysis would have to attempt to differentiate the institutional alternatives governing international transactions somewhat further.<sup>8</sup> This, however, requires a comparative institutional analysis of prototypes, which, in foreign trade theory, is still in its infancy.<sup>9</sup>

Two remarks seem necessary at this stage.

To begin with, the market as a coordination mechanism does of course also rest upon contracts. The simple sale contract (spot contract), which MacNeil – in a theoretical view – calls a “classical contract” (see MacNeil [1974, p. 1978]), is typical. This is the kind of contract that neoclassical theory implicitly presupposes. In a world in which specific investment (sunk costs), opportunism and bounded rationality are absent, i.e. in a world without transaction costs, the use of this type of contracts is absolutely sufficient for efficiency. The identity of the transaction partner does not matter: “faceless buyers” are confronted with “faceless sellers” and each contract of sale refers to a discrete transaction: “sharp in by clear agreement; sharp out by clear performance” (MacNeil [1974]). In a world *with* positive transaction costs, however, the relevance of this kind of contracts is rather limited. Such a world is governed by relational contracts, which are to regulate contractual relations in the shadow of specific investments.

Secondly, we would like to emphasize that we interpret hierarchy as a contractual relation (between employer and employee) as well. We view it as a borderline case of relational contracts, whereas the contemporary economic literature looks at hierarchy as something different from a relational contract. The traditional theory of the multinational firm primarily deals with the extreme case of hierarchy.

In the framework of a NIE program of research one would have to clarify in detail why different types of foreign trade chains can be observed at one certain *point in time* and why they do change with the *course of time*. One would also have to ask why certain foreign activities – be it activities of production in a narrow sense, activities of sale or different services – are taken on by domestic instead of foreign agents. To us, the

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<sup>8</sup> See, for instance, the enumeration by the Karenberg and Meissner study group of Schmalenbach-Gesellschaft [1983, pp. 3-12]. They mention for example: intermediation by a free agent, by a resident; creation of a sale/purchase company, of a service center, of an assembly/subassembly plant; tolling; manufacturing plants; independent enterprise; contracts for the use of technical know-how, trade-mark rights, rights to sale.

territoriality of law and the resulting constitutional uncertainty represent the clue to answering these questions.

As we will essentially analyze foreign trade activities one might get the impression that the approach we launch is exclusively applicable to foreign trade. This impression is, however, misleading. What we do is rather develop a paradigm of institutional economics, which we consider applicable to any kind of international business relations. We not only refer to “visible” trade but also to the exchange of services, esp. of financial services.

### **III. The International Trade Dilemma**

Consider a potential international transaction between a member of state A and a member of State E. We assume both actors to be risk neutral. Adam, a citizen of state A, promises to deliver a good which he values with  $X$  in exchange for a good, to be delivered by Eve, a citizen of country E, valued with  $Y$  by both. Eve’s valuation of the good delivered by A is denoted  $Z$ . We assume  $Z > Y > X > 0$ . Hence, the parties would mutually benefit if both promises were fulfilled.<sup>10</sup> However, this condition is not sufficient to guarantee that the parties will actually act as agreed: the agreement is not self-enforcing.<sup>11</sup> Assume that Eve can observe Adam’s move before making her own decision. The extensive form of this game (which is known as the “trust game”) is represented by Figure 2.

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<sup>9</sup> Buckley [1985b, pp. 39-59, see esp. p. 51] tries to offer a detailed typology. Yet it obviously rests on the dualism of “market” versus “hierarchy”. The category of “relational contracts” is missing.

<sup>10</sup> For easier exposition, we rule out third-party effects.

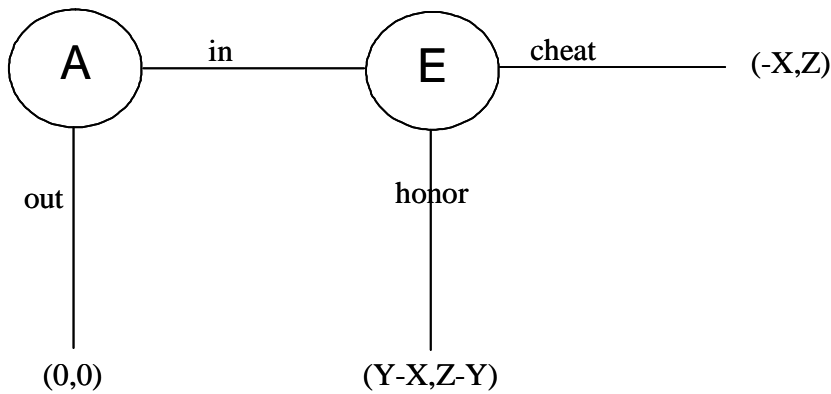


Fig. 2: The trade game in extensive form

Figure 3 shows the game in the strategic or normal form.

|     | honor          | cheat   |
|-----|----------------|---------|
| in  | $Y - X, Z - Y$ | $-X, Z$ |
| out | $0, 0$         | $0, 0$  |

Fig. 3: The trade game in normal form

Adam's payoff is the first entry in the brackets (cells of the matrix), Eve's payoff is the second. Adam has two strategies:  $\{in, out\}$ . The strategy *in* means delivering the good; strategy *out* can be interpreted as a national transaction (among citizens of state A), which yields a net gain of *zero*.

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<sup>11</sup> An analysis of an international transaction considered as a prisoner's dilemma game, which implies double-sided contractual hazards, is presented in Schmidt-Trenz and Schmidtchen [1991].

Eve has two strategies  $\{cheat, honor\}$ . It is common knowledge that the game is going to be played only once. If Eve follows through with the agreement, both Adam and Eve get a positive payoff.

However, Eve can instead take the opportunistic action “cheat”, which will yield her a larger payoff than choosing “honor” but Adam a negative payoff. Eve is tempted to cheat instead of honor the agreement. In anticipation of Eve’s opportunism, however, Adam chooses *out*. The unique subgame-perfect equilibrium of this game is the strategy profile  $(out, cheat)$ . The equilibrium is Pareto-inefficient, since both parties would have been better off playing the path  $(in, honor)$ . Let us call this kind of inefficiency “coordination inefficiency”.

In the normal form, strategy profile  $(out, cheat)$  is the only Nash equilibrium (in pure strategies). Eve could promise she will choose “honor”, but in the absence of some form of sanction the promise is not credible.

The inefficiency is due to the lack of any mechanism that protects Adam’s interests. From Adam’s point of view, the costs of enforcing the terms of the agreement are infinite. Adam’s not honoring the agreement leads to opportunity costs in terms of  $Z - X$ , which are shared in accordance with the terms of trade  $Y$ . Hence, both parties would agree to employ an institution that makes the option *in* Adam’s preferred choice as long as the gain from cooperation  $Z - X$  exceeds the costs of this device.

#### **IV. Ways to Overcome the International Trade Dilemma**

To overcome the international trade dilemma the trading game must be altered in such a way that it is individually rational for Eve to choose the cooperative strategy. In principle, there are three ways to accomplish that: contract law, private ordering, and international constitutional policy.

##### ***1. Contract Law***

A contract may be defined in a comprehensive manner as an agreement about behavior that is intended to be enforced (see Watson [2002, p. 115]). There are three methods of



contract enforcement: self-enforcement, external enforcement and automatic enforcement (see Watson [2002, p. 116]). A contract is self-enforcing if the parties to the contract have the individual incentives to abide by the terms of the contract. A contract is defined as externally enforced if the parties are motivated to carry it out by the actions of an external player, such as a judge or arbitrator. Finally, a contract is automatically fulfilled if it is carried out instantaneously by the agreement itself. We will limit our attention to self- and externally enforced contracts.

Suppose the parties make monetary transfers. First, Adam and Eve agree to play (*in, honor*), and, second, specify damages  $c > Y$  to be paid by Eve if caught cheating. Instead of the game in Fig. 3, which is called the underlying game, the players play the game depicted in Fig. 4, which is called the induced game. This game adds the expected transfers to the underlying game, with  $q$  denoting the probability of a transfer.

|     | honor          | cheat                           |
|-----|----------------|---------------------------------|
| in  | $Y - X, Z - Y$ | $-X + q \cdot c, Z - q \cdot c$ |
| out | $0, 0$         | $0, 0$                          |

Fig. 4: The induced game

The Nash equilibrium of the induced game is (*out, cheat*), since  $q$  is expected to be zero. In other words, the agreement with regard to the transfers is not self-enforcing.

An agreement to play (*in, honor*) is a self-enforced contract only if (*in, honor*) is a Nash equilibrium, which is the case if  $Z - Y \geq Z - q \cdot c$ . Since this inequality fails to hold, the players cannot rely on self-enforcement to support the outcome (*in, honor*).

The participation of a third party, whose actions serve to change the nature of the game between Adam and Eve, may be a way out. Suppose Adam and Eve agree to make the

promises to exchange legally binding. That is, to give the promises a form that allows a third party – the protective state – to use force in case of a breach.

The sanction potential of contract law can be represented in the form of a sanctions matrix. This matrix is a payoff matrix, which is added to the matrix of the original game (see fig. 3) and leads to an induced game with payoffs as depicted in fig. 4. In terms of game theory, the sanctions matrix stands for a binding agreement that is common knowledge and will be indisputably enforced by a third party. This binding agreement can be interpreted as if both actors wrote a contract and gave it to the third party. The third party can then – without cost - monitor the compliance with the contract and will therefore realize with certainty if the mutual obligations have been fulfilled, and can penalize breaches of contract like an angel of vengeance (see Friedman [1991, p. 13]). Because of this set up, the third party is not a “real” player; rather, it acts as a kind of machine whose execution - through the triggering of a certain signal - can no longer be stopped. In other words, the third party is incapable of being corrupted.

The equilibrium of the new induced game is an equilibrium in cooperative strategies, if  $Z - Y \geq Z - q \cdot c$ . It becomes obvious that the function of law in this context is to shift the equilibrium, or more exactly, to make the cooperative strategy into an equilibrium strategy. Regrettably, the aforementioned model of an externally enforced contract does not encompass the case of constitutional uncertainty that interests us here. If there were a world-wide monopoly on power, then this would be adequate – but we are confronted with a multitude of legal orders as well as the territoriality of law and therefore with a multi-polar system of the monopoly of power. Therefore, we have as many sanction matrices as there are nation states.

Since there are several courts in the world – Adam’s home court, Eve’s home court, or any other court in the world – which court has jurisdiction? Which law is applicable according to private international law? Does this law allow the players to write a complete contract, which specifies a transfer in case of a breach of contract? Courts do not always enforce what players write into their contracts; they often impose transfers on the basis of certain legal principles. Breach remedies include expectation damages, reliance damages, restitution damages – whatever the court awards.

Laws of conflict accompanied by bilateral or multilateral agreements among sovereign states define the options for filing a suit. It is possible that no court accepts jurisdiction or that several courts claim jurisdiction.

If Adam prevails, then an additional problem arises if Eve does not hold assets in the country where the judgement was made. In this case, the court ruling only becomes effective as an enforcement device if it is acknowledged in a state where Eve holds assets.

This list of problems suggests not to consider constitutional uncertainty as a kind of risk but rather as an instance of true or Knightian uncertainty. This uncertainty as to the values of  $q$  and  $c$  increases the transactions costs of international trade. For the previously mentioned reasons, it is in no way certain that the induced game actually guarantees an equilibrium in cooperative strategies.

## ***2. Private Ordering***

One cannot rely on court ordering alone to overcome contractual hazards. Williamson emphasizes an important reason for this: imperfect legal centralism. Courts operate subject to opportunistic behavior of lawyers and bounded rationality of judges. The diversity and territoriality of law are further sources of imperfection of court ordering (see Schmidtchen [1995]). Nevertheless, the international trade dilemma can be overcome by means of private ordering.

Private ordering refers to institutions or rules for settling conflicts in the absence of – or as amendments to – courts (see Eisenberg [1976]; Galanter [1981, pp. 8, 23]; Williamson [1984, p. 208]; Dixit [2004]). Although the distinction between “private ordering” on the one hand and “legal centralism” on the other is crucial, in reality any order is usually based on a mixture.

One reason why we can observe an extensive international division of labor in the presence of constitutional uncertainty is the fact that interactions do not take place once, but repeatedly: international traders play iterated games. The other reason would be a direct manipulation of the payoff structure in the one-shot game (of fig. 3).

A game is “iterated” if the single transaction is embedded in a long-term contract relationship, which gives scope for conditional cooperative behavior. Let us examine the situation where Adam and Eve experience a finitely repeated game with uncertainty about the future. This game has a finite number of stage games, but the players are uncertain about when the game ends. Within a repeated interaction, Adam and Eve can adopt conditional punishment strategies that induce the trading partner to honor the contract. These strategies allow for punishing other players if they deviate from the terms of the agreement. If the prospect of punishment is sufficiently severe, Adam and Eve will be deterred from deviation.

Suppose it is common knowledge that a stage game as represented by fig. 3 is repeated with a positive probability. For the sake of simplicity, this probability is assumed to be the same for all periods.

As long as both players comply with the contract, Eve’s stream of payoffs can be expressed as follows:

$$(a) \frac{Z - Y}{1 - p}, \text{ with } p = ]0,1[ \text{ denoting the discount factor. Parameter } p \text{ reflects both the}$$

probability that the game continues at least one more period and the time preference.

Supposing that Eve’s cheating is detected immediately and that Adam reacts by terminating the interaction on a permanent basis (grim strategy) Eve’s stream of payoffs when violating the contract amounts to:

$$(b) Z + \frac{p}{1 - p} \cdot 0 = Z$$

The contract is self-enforcing if, at any stage of the game, the following holds:

$$(c) \frac{Z - Y}{1 - p} \geq Z .$$

Solving this inequality gives

$$(d) p \geq \frac{Y}{Z} .$$

With condition (d) met, Adam will deliver  $X$  in each stage game.

Thus, neither Adam nor Eve stand to gain by deviating from the terms of the contract.<sup>12</sup>

The reasoning assumes that Eve's deviating action is immediately detected, and Eve must expect a grim punishment in the form of a permanent collapse of the mutually beneficial arrangement. But the idea can be extended to more complex situations, characterized by less than perfect detection of deviation, random matching of trade partner, and the existence of different behavior types (see Dixit [2004, pp. 97-123]).

Even under anonymity, cooperation can be explained if the international transaction is carried out by one or several mediators, e.g., export-import houses, that – due to iteration – maintain a long-term self-enforcing business relationship.<sup>13</sup> In such a case Adam and Eve draw up enforceable contracts with domestic business partners, and the international transaction and the risk associated with it lies in the hands of international traders who rely on private ordering.

The widespread institution of “documentary letters of credit” works in a similar way. Here, international payments are carried out by international correspondent banks, which stand in a long-term relationship with each other and therefore act cooperatively without the need for legal centralism.<sup>14</sup>

Just as cooperation can be brought about by a manipulation of the probability of a new business deal, it can be influenced by the manipulation of Eve's payoff. One way to ensure cooperation is through “hands-tying” (see Kronman [1985]) by sinking specific investments or transferring hostages – think of bank guarantees – so that the cooperative behavior is induced.

A hostage is a good valuable only to the “giver”. Let  $h_E$  be Eve's hostage to Adam. Posting the hostage by Eve yields, e.g.  $u_E(h_E) = Y$  and  $u_A(h_E) = 0$ , with  $u_A, u_E$  representing the value of the hostage to Adam and Eve, respectively. Hostage giving would change

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<sup>12</sup> Consider the following strategies: Adam's strategy is “Deliver so long as Eve has not chosen cheat in the past; but terminate the relationship in response to cheat”; Eve's strategy is “always honor”. For this to be an equilibrium, neither Adam nor Eve should stand to gain by deviating from their strategies. This is the case if condition (d) is met.

<sup>13</sup> See Schmidt-Trenz and Schmidtchen [1991, p. 335], where the function of a mediator is discussed for an iterated prisoner's dilemma game in which the players play the Tit-for-Tat strategy.

<sup>14</sup> Explanation of changes in international trade should, therefore, refer to the nexus between trade and financial services. Usually, there is a strong relationship between the volume and the structure of international trade and the evolution of its institutional framework.

Eve's payoff from cheating to  $Z - Y$ , which is identical to her honor-payoff. Thus, bilateral contractual compliance would be induced.<sup>15</sup>

Specific investments deserve a few additional remarks in this context, because the specificity of resources is usually seen as *a reason* for the creation of multinational firms (see Helpman [1984]). The latter appear as an institutional safeguard, which serves as protection against opportunistic behavior consisting of attempts to “expropriate” someone of the quasirents that are a result of resource specificity. In this context, resource specificity is usually being treated as an exogenous variable (see Helpman [1984, p. 455]). In the light of the approach supported here, however, this premise seems misleading. What matters is rather to explain this specificity, which essentially represents a “commitment” and thus is a precondition for the practicability of international transactions.

### ***3. International Constitutional Policy***

Even though the NIEIT still has not developed a cohesive conception of economic politics (but see Dixit [2004, ch. 6]), it offers the building blocks for an international economic policy. The central points are, first, the goal of establishing international possessive and transactional security, and second, the extent to which private ordering could be made more effective (and cheaper) through state actions. The latter is significant insofar as private ordering takes place in the shadow of the law. It is therefore not just about the option of legal centralism or private ordering, but also about assisting private ordering through legal centralism.

The economic policy must be predominantly international “Ordnungspolitik”.<sup>16</sup> “Ordnungspolitik” consists of measures shaping what Douglas North called the “institutional environment”. International “Ordnungspolitik” has so far dealt almost entirely with questions that are associated with public law (constitutional and administrative law). The private law branch is underdeveloped. An economic paradigm

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<sup>15</sup> Note that the assumption  $u_A(h_E) = 0$  is crucial. If Adam knows that Eve values the hostage at  $Y$ , he might be tempted to propose a bargain. A way out is to deposit the hostage with an honest trustee.

<sup>16</sup> A description of a public policy termed “Ordnungspolitik” in Germany can be found in Schmidtchen [1984].

for an international body of private law exists only as an outline. Whoever reads our textbooks gets the impression that all that is needed is to dismantle trade barriers - such as tariffs, import quotas, or administrative protectionism - and we would already have quasi-domestic economic conditions in the international arena. This is by no means the case. When the conditions of free trade are given, constitutional uncertainty is not eliminated because of the diversity and territoriality of private law.

Based on the principles of institutional economics, international “Ordnungspolitik” must generally focus on the question of how constitutional uncertainty in foreign trade can be avoided. Naturally, one immediately thinks of the unification or harmonization of law. This can occur in international procedural law, in PIL, and in substantive law (for an excellent overview, see Mankowski [2002]). In Europe, international procedural law is part of the attempt to enhance judicial collaboration and create a comprehensive legal area in Europe. The law of liability as a part of PIL is already in the process of being unified in Europe, and it has produced, to a degree, unity and legislative certainty which could not be achieved through a harmonization of national contract laws because of political restrictions (see Mankowski [2002, p. 132]). Meanwhile, the initiation of a unified European civil law code is being considered. It is controversial whether unified law should be generated by a competition of legal systems or through a central design (see Yearbook for New Political Economy, vol. 17 [1998], vol. 18 [1999]; Schmidtchen and Neunzig [2004]; Schmidtchen [2006]). But of all things, it should not be forgotten that constitutional uncertainty can be reduced not only by “Ordnungspolitik” but also by spontaneous order. In this context, one should remember the merchant law (*Lex Mercatoria*) as a kind of so-called “spontaneously created law” and its relation with international arbitral jurisdiction (see Milgrom, North and Weingast [1990]; Schmidtchen [2002]). But from an economic standpoint, these questions are not even formulated – not to mention the answers.

## **V. Conclusion**

Through almost all ages, lawyers have been concerned with the questions resulting from the diversity and territoriality of law; economists have dealt with them only rarely. This is

all the more amazing as both issues should have taken a prominent place on the agenda of international trade theory, at least with the advent of New Institutional Economics (i.e. property rights analysis, contract theory, transaction cost economics, constitutional economics).

This paper focuses on the problems of the coordination of foreign trade activities in the shadow of the fragmentation and the territoriality of law. The fragmentation and territoriality of law result in the emergence of a special kind of uncertainty which is reflected in corresponding transaction costs.

We attribute the fact that international trade takes place smoothly in spite of these unfavorable circumstances to spontaneous forces, which have resulted in almost complete self-regulation of this area of economic life, based on private initiative. The category of “relational contracts” is of predominant importance in international trade. It refers to contracts as governance structures (frameworks) built for long-term relationships allowing for several – or many – transactions. The antipodes, i.e., discrete transactions between anonymous agents (trade between “faceless buyers and sellers”), would hardly work in international trade. This requires a developed legal system and protective safeguards as in an ideal domestic economy.

Numerous analyses confirm the impression that foreign trade is dominated by long-term business relationships. To be more precise, we would like to speak of the so-called F-connections mentioned by Ben-Porath [1980]. Thus, we may hypothesize that foreign trade is dominated by the categories (a) family, (b) trade friendship, and (c) firms.

As for the institutional arrangement “family”, we only mention the Jewish trading network of the Middle Ages. The formation of trade clubs (see Carr and Landa [1983] and Cooter and Landa [1984]; Greif [1993]) can be classified as “trade friendships”, of which the Hanseatic League is an example. Also the multinational firm receives a new justification on this basis. That is, each form of vertical integration across state borders can be regarded as a means to construct those indispensable reciprocal relationships, which prove self-supporting in the absence of effective protective authorities. Managers of associated firms find themselves in this kind of “lock-in” relationship, which ensures, through a high probability of the iteration of a stage game, cooperative behavior with respect to an international transaction that has been transferred *into* the (multi-national)



firm. Here, we maintain, lies a cause, previously overlooked, for striving towards vertical integration observed particularly in international economic relations. On the basis of “blackboard economics” a general answer cannot be found to the question of what kind of institutional structure will be chosen in a concrete case. To us, the “investment in trust” is the decisive variable. Our approach therefore regards direct investment as a way of transforming transactional insecurity into possessive insecurity. In the view of the territoriality of law this seems at first glance a comparatively costly procedure, since the property of a person or organization is exposed to the arbitrariness of a foreign government. But in our understanding, direct investment is rather apt to be an investment in trust and amounts to a signaling activity an international transaction would not materialize without.

Considering the dominance of the aforementioned F-connections one notices that foreign trade has only little in common with the “Great Society” presented by Hayek [1973, p. 29], as there is no safeguard for the general and abstract rules, which make an interaction of anonymous partners possible. What is much more vital to foreign trade is the identity of the trade partner, the F-connection. The tendency to “internalize” transactions is therefore more pronounced here than in domestic trade.

However, these forms of “private ordering”, which compensate for the missing “legal centralism” in the international arena, may not be a first best solution, since the extent of division of labor is less compared to a “Great Society”. This leads to the question to what extent constitutional policy can bring us nearer to a worldwide “Great Society” with a legal centralism of a cosmopolitan type. In this setting, constitutional policy has the task of disclosing possible deadlocks or dilemmas in the spontaneous formation of institutions and of promoting and overcoming constitutional uncertainty by providing a bridge between different national legal systems.

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