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Linking Regions and Central Governments
Contracts for Regional Development

Chapter 1

A Contractual Approach to Multi-level Governance[1]

This chapter develops an analytic framework for understanding how the economic theory of contracts applies to multi-level governance and what these theories suggest with respect to the selection of a contractual approach. It begins with an overview of the relevant theories, presents an analytic typology of contracts, and assesses the most effective contract design for different co-ordination contexts. The analytic framework developed in this chapter is applied to each of the case studies in subsequent chapters.

1. Introduction

For the last 15 years, a dramatic change has been occurring in public decision making and public policy building. Decentralisation of tasks by central government and attribution of prerogatives to lower institutional levels have been increasing. From a theoretical perspective, decentralisation seems to be justified for many reasons: more decentralised jurisdictions can better reflect heterogeneity of preferences among citizens; multiple jurisdictions can facilitate credible policy commitments; multiple jurisdictions allow for jurisdictional competition and they facilitate innovation and experimentation.

Decentralisation has, in the first place, a financial dimension. Increased local responsibilities has been leading to an augmentation of sub-national expenditures, while the taxing power of sub-national governments has been declining or at best remaining stable. "Decentralization seems to result in more regional responsibility, at the same time with an increased dependence on the central government for resources" (Bergvall *et al.*, 2006). As stressed by Oates (2005), decentralisation requires therefore the design of specific devices to govern the increasing transfers from central to sub-national institutional levels.

Decentralisation implies the assignment to sub-national governments the power to choose the nature and content of public policies. This increasing burden on the sub-national governments has given rise to the need to build local competence, which has constituted a further characteristic of decentralisation policies that they should generate and benefit from "learning by doing" effects.

The necessity to manage financial transfers and the empowerment of sub-national levels of government led central ones to design new devices to manage interactions among levels of government. Multi-level governance has gained importance and resulted in institutional changes and innovations. Central governments were led in particular to propose contracting relationships across levels of government. Within OECD countries, these evolutions correspond to the use of new, more co-operative arrangements aimed, both, at managing more efficiently (and more clearly) the relationships among levels of government and at adapting national policies to local contexts.

However, contracting among levels of government is not only linked to decentralisation. In a federal (and confederal) states with *ex ante* well-established assignment of responsibilities among the levels of government (*e.g.*, Canada), many policy issues require co-operation among levels of government and contracts are useful tools to deal with these inter-dependences. Thus, contracting among levels of government is linked to multi-level governance and not to decentralisation policies alone. To put it another way, in unitary regimes contracting is useful to manage decentralisation policies and empower progressively sub-national levels of government (*e.g.*, France, Italy). When decentralisation is already in place (*e.g.*, Canada) or has been achieved (*e.g.*, Spain), contracting is useful to manage co-operation, especially in cases of innovative policies and in cases in which policies have to deal with inter-dependencies (rather than competition).

The goal of this study is to develop an analytical model to explain the efficiency of the alternative modes of contracting between central governments and sub-national levels of government, and to assess how performance could be enhanced. This paper focuses on the non-financial aspects of "contracts", that is on the governance of the relationship between the levels of government. The organisation of tax collection and financial transfers is therefore not analysed in detail, considering that this analysis is detailed in a complementary OECD analysis (Bergvall *et al.*, 2006).

Two sets of economic theories are used to analyse relationships among levels of government through the lens of "contractual" approaches. First, new institutional economics (agency theory, transaction costs economics) provides a toolkit to analyse contracting practices among parties. Second, new political economy (public choice analysis, constitutional political economy, including social contract theories) provides tools to understand the context in which these bilateral contracts perform. It is important to note that the term "contract" here is employed in a conceptual sense (see Brousseau and Glachant, 2002).

In contemporary economics, the notion of "contract" refers to the bilateral agreements between two parties (decision makers) – whether individuals, firms, governments, etc. – concerning their mutual obligations to govern their relationship. To co-ordinate or co-operate parties have to agree on:

- An assignment of decision rights (authority), which could include shared rights leading to a negotiation procedure.
- A distribution of contributions, which include funding, human capital, assets, etc., and lead to the setting of mutual duties.

- Mechanisms guaranteeing the enforcement of their mutual promises, leading to the implementation of supervision mechanisms and agreement on conflict resolution procedures.

The economic notion of contracts employed here is therefore broader than its legal counterpart, even if the difference between the definitions given by economists and lawyers is not so large. It suits the type of situation being addressed since in practice the mechanisms that govern the relationship between two levels of government are made up of a mix of formal contracts, constitutional arrangements, laws, and administrative rules. In this document these various legal tools are used to understand contractual arrangements between governments in a common analytical framework allowing for comparisons between practices implemented in countries characterised by different constitutional regimes and legal traditions.

The goal of this paper is to understand how contracting practices in various contexts can be effective. It relies strongly on the perspective proposed by the American theoretician of law Ian Macneil (1974) according to which there is a continuum of contractual practices among two contrasting co-ordination logics: "transactional contracts" and "relational contracts". The former state precisely and completely the rights and duties of both parties *ex ante*. By contrast, "relational contracts" simply design the framework of an *ex post* co-operative process. "Transactional" contracts are very secure, but might be complex to design because every future contingency has to be dealt with in advance. In addition, they suppose that both parties know *ex ante* all the solutions to the project they will undertake. "Relational" contracts are less secure, since mutual commitments are incomplete and can be interpreted in various ways *ex post*. They are more flexible, however, and therefore better suit complex and evolving projects. Moreover, they make it possible to accumulate knowledge and invent, because their flexibility enables them to experiment and to implement solutions that are learnt by doing.

What follows will attempt to characterise more precisely the various forms of contracts that can be implemented between a central government (CG) and sub-national authorities (SNA) (for definitions used in contract theories, see Box 1.1). It will be pointed out that the various alternatives suit different co-ordination situations that are characterised by the types of projects that are jointly operated and the context of the relationship between the two levels of government (distribution of skills relevant for the project, ability of both levels to credibly commit themselves *vis-à-vis* the other party, etc.).

This report shall adopt a costs/benefits type of analysis to compare the advantages and the costs associated with a contractual mode. On one hand, the benefits can be expressed in terms of enhanced effectiveness (*e.g.*, it can

Box 1.1. **The "language" of contract theories**

This paper is based on contract theories, through which the governance of relations between levels of government will be analysed. Thus, it relies on the specific wording of contract theory, which must therefore be clarified so as to avoid misunderstanding. Some essential definitions follow:

Contract: This term refers to any agreement between two parties aimed at stating mutual and respective obligations (which can be linked to financial compensations), granting decision rights and liabilities, implementing audit and reporting systems (generally associated with bonuses and penalties), and designing conflict resolution mechanisms (or stating what are the authorities and the procedures to solve potential conflict). The "contract" analysed in this report between the two levels of government might therefore be partly "constitutional" and partly "contractual" from a legal point of view.

Contractual hazards: Most contracts expose parties to risk because each party promises something in exchange for an expected return from the other party. Many reasons can explain why mutual commitments are not met: unexpected events – contingencies – can prevent one party from giving what it promises; a party may be unable to provide something – *e.g.*, a level of quality – that was promised because of a lack of skills; a party can decide not to provide what it promised because it is no longer its best interest to do so, etc. Whatever the reason, the doubts about the fulfilment of promises are central in contracting. To make co-ordination between the parties possible, the contract has to be designed to guarantee the *ex post* (see below) enforcement of promises made *ex ante* (see below).

***Ex ante* and *ex post*:** In contract theories *ex ante* refers to everything concerning the period before a contract is signed, particularly to the information the co-ordinating parties know about their future interactions. *Ex post* refers to everything concerning the parties during the performance of the contract. These categories are widely used because, by establishing mutual rights and duties, contracts change the bilateral relationship between the two parties. *Ex ante* and *ex post* can also be used to contrast the contract negotiation phase with the contract performance phase.

To align: Contracts seek to make the interests of the two parties compatible *ex post*, as opposed to *ex ante* (otherwise efficient co-ordination would be guaranteed and contracting useless). A contract seeks therefore to "align" both parties' interests by manipulating the relationship between the actions taken by the parties and what they get from the interaction (a financial reward, a symbolic benefit (such as reputation), wealth resulting from the consumption of a service, etc.). This alignment has to take into account the various situations the parties could face *ex post*.

Informational environment: Contractual difficulties partly derive from the fact that the two parties do not share the same information (information

Box 1.1. **The "language" of contract theories** *(cont.)*

asymmetries) and do not know all the relevant information to co-ordinate in the future, such as the list of potential contractual hazards (information incompleteness). The informational environment therefore partly states the co-ordination difficulties the parties try to solve by way of contracts and the constraints they face when doing so.

Delegation: This generic term is used throughout this report to describe situations by which the central government assigns the realisation of a task or the performance of a policy to a sub-national government. It captures the concepts of devolution, deconcentration, decentralisation, and delegation.

Repeated game: A relationship between two parties can last much longer that the period for which a contract is set. This being the case, a new contract, or a set of new contracts will follow. The contracting "game" is repeated and the relational situation between the parties can evolve from one period to another, in particular because the parties learn.

Residual (rights and claimants): A contract can state in advance the return to be acquired by each party (their remuneration). It can also set the remuneration of all the parties but one, which will benefit from the surplus remaining after the completion of the contract and after each party benefiting from an *ex ante* fixed remuneration is paid. This party becomes the residual claimant, and is the holder of the residual rights (to be remunerated). Such a risk is generally accepted by the residual claimant in exchange of the right to decide what the parties should do during the performance of the contract.

Adverse selection (and also "hidden information"): occurs *ex ante*, when one agent uses its informational advantage on a variable that cannot be manipulated during the completion of the exchange. For example the central government can delegate the building of infrastructure but may not know the local technical constraints. If only the sub-national government possesses this information, it may use this informational asymmetry to its advantage (*e.g.*, by requesting more than the minimal amount required to fulfil its obligation). This leads to inefficiencies since the central government will pay more than necessary. In certain circumstances – depending on the skills of the sub-national government – local welfare can also be improved if the agent misrepresents its own characteristics (see discussion on Incentive Theory).

Moral hazard (and also "hidden action"): occurs *ex post*, when one agent benefits from an informational advantage on a variable that he can manipulate during the completion of the delegation. For instance, the central government delegating the provision of a public service of a certain quality might be unable to measure precisely the quality of this service *ex post*, perhaps because it is costly or because it is difficult to observe. In this case, the sub-national government may deliver a low quality, thereby lowering its costs while simultaneously benefiting from the grant that was calculated based on the costs of high quality (see discussion on Incentive Theory).

be assumed that SNAs have a better knowledge of the actual local implementation constraints, which will result in a more efficient implementation of a policy), including indirect effects (*e.g.*, a successful assignment policy can impact positively on the development of local capabilities and can also have a positive effect on accountability with decision making being is closer to citizens). On the other hand, costs have to be understood broadly, both in terms of the cost of setting and running the contractual arrangement and the inefficiencies that it can generate. For example, delegation to SNAs can result in an inefficient implementation, either because sub-national authorities strategically manipulate the means provided by the CG to pursue their own goals, or because they are not skilled enough. The analytical framework developed by New Institutional Economics and New Political Economy facilitates understanding regarding how to maximize benefits and minimise costs in various contexts.

The document provides a framework to analyse the problems raised by contracting among levels of government, which is developed in steps:

- First, the nature and the context of the co-ordination problem between the CG and the SNA is identified through a descriptive framework (Section 3).
- Second, the nature of the implemented governance solutions (*i.e.*, the contracts) is analysed in contractual terms by describing how the co-ordination problems are solved through the process by which the two parties contribute, make decisions, renegotiate, supervise implementation, solve conflicts and make sure that promises made *ex ante* will be enforced *ex post* (Section 4). The objective of this section is to match co-ordination contexts with effective contractual solutions.

Thanks to this framework it is therefore possible to characterise co-ordination problems and solutions through common analytical perspectives. It enables us to compare national experiences – namely in Canada, France, Italy, Germany and Spain – and to assess performances of alternative mechanisms, so as to suggest policy recommendations to design efficient contractual/governance mechanisms among levels of government.

Before developing the framework, a rapid overview of the theoretical tools used in the analysis is provided to enable the reader to understand how they can be combined to address policy making issues in the context of the management of co-operation between levels of government (Section 2).

2. The contractual approach to multi-level governance

For the past 20 years, economics has been developing several complementary analytical frameworks aimed at understanding co-ordination problems in terms of delegation of authority, and the design of incentive and enforcement mechanisms within the framework of the so-called "contract

theories". Indeed, any co-ordination mechanism between two parties can be understood as a deal setting mutual rights and duties between them. These theories have been successfully applied to a wide number of questions ranging from inter-firm co-ordination to the optimal design of constitutions, and encompassing a broad set of issues relevant for policy making. The fields of application include anti-trust and competition policies, regulation/deregulation of public utilities, regulation/self-regulation of markets, institutional design, and in particular relationships among regulatory agencies, the government, legislative bodies and the judiciary.

This section presents the analytical tools that are relevant in analysing the relationship between a central government and a sub-national one when the former decides to assign the realisation of a policy to the latter or when both governments wish to co-operate in the implementation of a common policy. The tools provided by contract theories (Section 2.1) and those developed by the new political economy (Section 2.2) are both reviewed. A detailed presentation of these theories is available in Brousseau and Glachant (2002).

2.1. Contract theories

Contract theories propose economic models to explain the rationale of the co-ordination mechanisms built by agents when they interact. All theories focus on contractual hazards. The basic idea is that most exchanges, and particularly co-operative processes, expose parties to risk because each party gives something in exchange for an expected return from the other party. Many factors can explain why mutual expectations can be not met. Generally speaking, incentives to fulfil obligations can change with the passing of time and it is no longer in the best interest of one of the parties to do what it promises.

Contract theories can be interpreted as if three dominant modes of contracting existed along a continuum ranging from complete transactional to incomplete relational contracts. The best contract to be implemented depends upon the nature of the co-ordination problems to be solved between the levels of government and upon the institutional context in which the contract is drawn up.

Transactional contracting corresponds to a situation in which all co-ordination problems can be solved *ex ante* (at the time the contract is signed). It corresponds to a contract stating precisely the various tasks to be operated by the parties and the rewards they will get in return. In contrast, relational contracting corresponds to a situation in which co-ordination problems are predominantly solved *ex post* (during the performance of the agreement) because the parties decide how they should behave when they observe the situation they actually face. It corresponds to contracts that do not state what

actions will be implemented *ex post*, but who will have decision rights on what (and in addition how benefits and costs should be split between the parties). Thus contract theories (and contractual logics) differ among each other by stating whether co-ordination problems can be solved or not before the start of the contracting period, and by stating whether precise tasks to be carried out by the parties can be decided *ex ante*, or whether the parties can only contract on rights to make decisions.

- Incentive Theory refers to contracts that solve coordination problems *ex ante* by stating precisely the actions to be taken by the parties.
- Incomplete contract theory analyses how co-ordination problems can be fully solved *ex ante* by distributing adequately decision rights between the parties.
- Transaction costs economics point out how co-ordination problems can be solved *ex post* by designing and allocating decision rights that result in an adequate "governance" mechanism.

2.1.1. Incentive Theory: delegation and its costs

The Incentives Theory framework envisages the relationship between a central and a sub-national government as a problem resulting from the delegation of a task by the latter to the former because the central government is unable to efficiently implement its policy at the local level due to a lack of information about the specificities of the local situation. Unfortunately, this lack of information may cause imperfect delegation in which the central government is unable to perfectly monitor the sub-national authority. Since the latter can anticipate this inability, it can try to strategically exploit its informational advantage to use the resources provided by the central government to its own advantage and/or for purposes that are not those targeted by the central government.

The theory points out that if the central government has a good knowledge of what might be the local implementation constraints; it can then design an incentive scheme that will guarantee *ex post* the best possible performance of the sub-national government. A subtler "strategic" game can be organised through the delegation process – or the negotiation phase of the contract – by which the central government leads the sub-national one to reveal its private information about its "local" implementation constraints and its costs. Such contracts allow the central government to benefit from the advantage of decentralisation by relying on the capabilities of the sub-national government, which is better informed of local constraints, while minimising costs – which translates into looser control by the centre of the decentralised policy, thus allowing the local government to target its own ends. However, the ability to implement the contracts is subject to strong conditions, and in

particular to a reliable enforcement environment and to a high level of skill of the local government. Such conditions are not met in every decentralisation policy.

2.1.2. Incomplete Contracts Theory (ICT)

The purpose of ICT is to analyse how optimal incomplete contracts are designed. These contracts are incomplete because some relevant tasks cannot be specified. They are nevertheless optimal, since solutions are available to motivate the parties to behave in a mutually optimal way in the future. The theory focuses on the way to distribute decision rights (by way of managing accountability between the parties), so as to guarantee optimal *ex post* decision by them.

The theory focuses on situations in which it is impossible to settle a complete list of required actions *ex ante*, which leads to the idea that a renegotiation mechanism – based on the distribution of rights to make decisions *ex post* – should be implemented. However, it refers to context in which the results of alternative distributions of decision rights can be anticipated because the incentives of the decision makers can be forecasted. An adequate distribution of decision rights *ex ante* guarantees therefore the quality of the decisions that are made *ex post*.

Incomplete contracting refers to situations in which both parties contribute to implementation of a joint policy, while the optimal contribution of each of the parties depends upon the contribution of the other and of the general economic and political climate. The problem occurs when the contribution of both parties are uncontractable because no court would be able to state whether each party fulfilled its obligation (which would require a perfect assessment of the contribution of each and of the climate mentioned). When this occurs, the central government can propose an incomplete contract to the sub-national authority by which it guarantees a contribution to realise a minimal plan, while the sub-national authority is free to implement an enhanced plan should it be needed. The key point here is to let the sub-national level be the "residual claimant" of the decentralisation process, and to let it propose an enhanced project to the central government once a "minimal plan" (default option) has been realised. These incomplete contracts are the "best response" when complete incentive schemes are not implementable (in particular because the enforcement environment does not allow it (inadequately skilled courts, for instance). However, they have a higher cost in terms of loss of control for the central government. Moreover, their implementation is also subject to strong constraints, especially to high capabilities from both levels of government.

2.1.3. Transaction costs

Transaction Cost Economics (TCE) relies on the idea that any interaction (transaction) between economic agents is costly and that they should therefore seek to implement co-ordination mechanisms that minimise these so-called transaction costs, which are of two types. First, there are costs that are borne *ex ante* by the parties to reach an agreement. They include the cost of negotiating the agreement and writing it (*i.e.*, deciding what will be the best responses to future contingencies). Second, there are costs that are borne *ex post*, when the parties co-ordinate in the framework of the contract they agreed on. These latter costs are twofold. On the one hand they correspond to the costs necessary to manage co-ordination; *e.g.*, making decisions, supervising parties' behaviours, settling disputes. On the other hand, they correspond to the inefficiencies that can be generated by the contractual arrangements, if it happens that the *ex ante* stated obligations are found to be poorly adapted to the actual co-ordination issues faced by the parties in the performance of the agreement. It is assumed that imperfectly rational agents that have in addition an incomplete vision of the future can make mistakes when designing mutual obligations, resulting *ex post* in maladaptation (or misalignment) of the solutions decided on *ex ante* for the actual situations faced by the contracting parties.

Transaction Cost Economics, points out that when it is not possible (or too costly) to set *ex ante* the list of tasks that should be carried out *ex post* (in particular because the future and complex strategic games among parties are too complex to let actual contract designers to make sure that they would be able to implement in the contract all the "best responses" to these situations), the parties should design a governance mechanism based on the delegation of authority between the parties, that includes *ad hoc* enforcement mechanisms and specific conflict resolution procedures. TCE insists in particular that two levels of government should co-operate in the management of joint and innovative policies. The issue for the central government is no longer to avoid losing control, but to share it. Parties are no longer organised in hierarchy, but co-operate on joint projects. Contracts are not "optimal", but "enabling".

2.2. New political economy and delegation as a constitutional process

While the models discussed above analyse the contracts between levels of government, "new political economy" utilises the concepts of contract theories to analyse the delegation of political responsibility by the citizens among levels of government. It questions the division of powers, the allocation of authority and the assignment of tasks across the different institutional levels. It is, however, beyond the scope of this paper to develop these issues here.

New political economy leads, however, to a clearer understanding of the contrasted co-ordination logics between levels of government in a federal state and in a unitary state. Even if there are no pure forms of these two polar cases, it is enlightening to point out that in a federal state, levels of government tend to be more independent from each other and more accountable than in a unitary regime. Indeed, in a federal state, the power of sub-national governments draws directly from a delegation of power by the citizens, who delegate different responsibilities to the sub-national and to the federal governments. In a unitary regime, the citizens delegate power to the central government, which then can assign responsibilities to sub-national levels of government. As a result, in a unitary regime, the central government is considered by the citizens as accountable in last resort for the whole politic, while accountability is divided across levels of government in a federal state.

Of course, political reforms may seek to increase the accountability of sub-national government in a unitary state. However, sub-national governments are structurally more accountable in a federal state than in a unitary one. This is because distribution of responsibilities among levels of government tends to be clearer in a federal state and draws from the institutional arrangement between the citizens and the (national and sub-national) governments, and not just from the central government's desire to delegate some of its prerogatives to sub-national levels. In turn, sub-national governments tend to be more sensitive to horizontal competition in federal states and are more inclined to co-ordinate with their citizens to satisfy them (because they are clearly identified as responsible for a given set of policy domains).

The main consequence for the analysis of contracts between levels of government is that the enforcement environment differs in both types of regimes. In federal states political accountability constitute *de facto* an enforcement mechanisms for contracts between the levels of government. The contract indeed makes publicly clear the mutual duties of levels of government when they need to co-operate in a given political domain. The citizens can therefore state whether the various levels fulfilled their promises and credit each party for its contribution to a joint project (which might result in electoral sanction in case of failure to comply). Since the distribution of political accountability is less clear in a unitary regime, the enforcement of contracts tends to rely more on the judiciary than in a federal state.

This raises the issue of the independence and the efficiency of the judiciary responsible for settling contractual disputes between levels of government. At first glance, both independence and competency should tend to be higher in a federal state. It is indeed essential to implement independent courts since potential conflicts among levels of government are high and could be damaging. However, in actual fact, there are many federal states

without such courts that could create an efficient judicial enforcement environment for contracts. By contrast, a unitary regime seeking to compensate for the weaknesses of an excessively centralised structure and lack of sub-national political accountability can require an independent and skilled court system to supervise the enforcement of contracts among levels of government.

These elements in mind, it is important to point out that there are neither pure federal states nor totally unitary regimes. In reality, the division of prerogatives, of political accountability and the political independence of the various levels of government are never totally clear. This leads to manifold inter-dependencies across levels of government. One of the purposes of contracts is to make these inter-dependencies explicit and to control their effects.

2.3. Contracts between levels of government

Economic theories of contracts were initially developed by scholars focused on the co-ordination problems to be solved between totally independent individual agents oriented toward the maximisation of their individual preferences. The analytical categories that were relevant in that context have to be adapted to the specificities of the relationship among the levels of government. Indeed, governments are:

- *Organisations and not individuals*: They are characterised by compromises among coalitions of interests: those of their constituency (the citizens), but also those of the political decision makers, of the civil servants, etc. The objectives of the contracting parties might be multiple and complex and might actually be biased by some predominant interests. In what follows, this report will make the simplifying assumption that each level of government seeks to maximise its constituency's wealth, but it is clear that there is a potential for "capture" of contracts by particular interest groups. At the same time, contracts among levels of government play a strong role in contributing to transparency. By being explicit and public, contracts among levels of government tend to weaken the ability of interest groups to capture the relationship among the levels of government in favour of their sole interests.
- *Intertwined*: The various levels of government are not totally separate with completely different constituencies and prerogatives, even in a federal state. As a result there are commonalities and fuzziness in the relationships among the levels of government. These result both in common interests and in conflicts of competences that impact on contractual practices since co-ordination problems may arise from and be solved by other means than the contractual means per se. For instance, the reactions of citizens (from

demonstrations to voting) provide incentives for the governments beside those provided by reciprocal promises. Again, it is important to point out that contracts make things explicit. One of their advantages in the context of the relationships among levels of government is that they allow for controlling inter-dependencies/co-ordination problems that are hardly resolved by the assignment of responsibilities and organisation of the relationship among powers organised by the constitution. Whether the state is federal or unitary, contracts can be seen as complements to the constitution. They allow for an adaptation of it to manage specific needs and at the same time do it formally, which matters with regard to political accountability. Also, contracts can highlight and manage the consequences of common interests among the levels of government. This will be illustrated later with the idea that central governments might seek to empower sub-national ones.

- *In addition the relationship between the two levels of government is endless*. This statement must be qualified since the governments can co-operate on a specific matter for a short period of time only. In addition those in charge can have a high turnover, which impacts when contracts rely on informal mechanisms (*e.g.*, social networks) to perform. However, it is clear that governments are in a repeated game situation, which could hinder any need for contracting according to theory (Axelrod, 1984; Kreps, 1990), since the pure logic of potential retaliation should in principle lead parties to co-operate optimally. Again, in actual fact, contracts are useful since they make explicit the mutual promises among the levels of government. In a world of imperfect (and manipulated) information they might be useful to sustain co-operation.

Contracts among levels of government can vary along a continuum ranging from pure transactional contract to relational one. In the case of relationship among levels of government, it should be highlighted that decisions have to be made about the objective of the jointly operated policy and about its implementation. Implementation refers to the tasks/actions that have to be taken.

- In the spirit of the Incentive Theory, a pure transactional contract refers to situation in which the CG set in the contracts both the objectives and the action to be taken by the local government. The only problem is to ensure that the latter acts accordingly.
- In the spirit of the incomplete contract theory, the intermediary situation corresponds to a situation in which the CG assigns objectives to the sub-national one, but lets it design the actions it should take to fulfil them. Of course, the complexity here draws from the fact that the implementation

capability of the sub-national authority depends on the means provided by the CG and also from its action at the national level.

- In the spirit of transaction cost economics, pure relational contracting refers to situations in which neither the objectives nor the tasks to be taken by both levels of government are defined in advance. The two governments decide to co-operate on an issue, but they need to learn and to negotiate further to define a strategy and a tactic to deal with it.

In what follows, the report aims to identify the drivers of the choices between the three contracting logics.

3. A typology to characterise co-ordination problems

The purpose of the present section is to draw a typology of co-ordination difficulties/context that characterise joint-implementation of policies between a central and a sub-national government in case either of delegation or of co-operation. Four characteristics/dimensions are highlighted: the distribution of knowledge between the parties: (Section 3.1); the complexity of the policy domain (Section 3.2); the degree of inter-dependence between the national and local policies in the domain (Section 3.3) and the enforcement context resulting from the institutional framework (Section 3.4). A conclusion will discuss the increasingly risky/complex situations that lead to evolving away from complete transactional contracting to incomplete relational contracting (Section 3.5).

3.1. The distribution of knowledge

The levels of government benefit from different skills or competences to implement specific public policies in certain domains and contexts. This depends on the policy in question and on their accumulated experience. Indeed, the ability to implement various forms of contracts depends upon the respective capacities of both parties to establish relevant objectives in the domain and to forecast and decide actions to be taken to reach them. Furthermore, the various levels of government may have different capacities to gather the information required to implement a policy. To simplify the analysis, four possible distributions of information and knowledge, corresponding to four co-ordination situations, are proposed.

Table 1.1. **Four types of knowledge distribution**

		Central government	
		High	Low
Local government	**High**	HH	LH
	Low	HL	LL

Thus:

- **HH:** corresponds to what Incentive Theory describes. The central and the sub-national government are equally skilled. An optimal incentive scheme can then be implemented. The contract can be complete because the principal is able to determine *ex ante* how to solve all the co-ordination problems likely to arise *ex post*. This corresponds to the delegation of the implementation of a rather standard policy (*e.g.*, building standard infrastructures as roads). For whatever reasons the central government is responsible for the policy, it relies only on the local government capability for implementation and tries to control potential rent extraction.
- **LH:** the central government ignores the constraints that the local government face. Neither incentive scheme, nor any complete contract can be implemented. However, an information revelation mechanism can be implemented to learn from the sub-national government, especially if the central government intends to deal again with the same type of issues with this or another sub-national government in the future. This corresponds again to a situation in which the central government is responsible for the given policy, but would like to benefit of the sub-national expertise to implement it. This is the case when the central government is seeking an innovative technique to implement a policy. However it might fear capture of its means (or misuse of its contribution) by the sub-national government, while being accountable in last resort of the policy in question.
- **HL:** a skilled central government delegates tasks to a sub-national authority that is not skilled. The central government therefore does not fear strategic behaviours of the sub-national authority, which might occur in the two former cases. Here the issue for the central government is to train and empower the sub-national one. This is typically the situation faced by unitary regimes carrying out decentralisation policy.
- **LL:** both parties are unskilled. Neither of the parties knows precisely how to deal with the policy issue. They must therefore to co-operate in identifying more clearly how the problem can be addressed (*i.e.*, stating policy objectives) and how to implement the policy. The only certainty is that the parties are involved in a common venture, in which they will share costs and benefits. This obviously calls for relational contracting aimed at managing new and innovative projects.

Thus, the distribution of knowledge strongly influences the choice of optimal contracting practice due to the fact that it is highly correlated with the logic of the relationships among the parties (delegation *versus* co-operation). However other factors matter. Before getting turning to these factors, it is important to point out that knowledge distribution is partly endogenous.

By definition the (absolute and relative) levels of skill of governments may evolve with the passing of time because parties can "learn by interacting". Accordingly, the ability to re-shape the governance mechanism in relation to accumulated experience is essential: contractual arrangements may have to evolve because agents increased their knowledge. This has three main implications.

First, the "optimal" contract (*i.e.*, an incentive *versus* a relational contract) that should be implemented given the features of the contracted policy is not always a "feasible" solution. In such case, the parties shall play on the scope of what is contracted and on the degree of incompleteness of the contract to manage a learning process leading progressively to the optimal contractual practices (and possibly the elimination of contracts). For instance, when a complete contract should be preferred, everything being equal, and when incomplete contracting or renegotiation provisions might decrease the credibility of mutual commitments, their contractual implementation provides the opportunity to redraft the agreement with the accumulation of experience. Optimal contracting should therefore allow mutual learning. This gives rise to the idea that contracts among levels of government should rely on tools that allow experimentation and the dynamic implementation of the accumulated knowledge in the contract, which, by the end of the process, may become more complete, but which should be incomplete at the very beginning.[2]

A corollary of what has been written applies more specifically to decentralisation policies. When the sub-national government is unskilled in implementing a policy, the problem of the central government is not "opportunism". Complete contracting could at first sight appear as the best option to guarantee efficient implementation. It would, however, fail to motivate the sub-national government to invest in learning. A second strategy rests on a mechanism aimed at training the sub-national government to manage new policy domains. In such a dynamic vision, the contract between the central and the sub-national government is no longer a matter of "optimal incentive scheme" to control for possible opportunistic behaviour. It is rather a tool enabling the progressive assignment of responsibilities to the sub-national government after training has occurred. Two strategies can then be implemented by the central government. Either it chooses to delegate wide policy domains to the sub-national authority from the very beginning and to co-operate (on the basis of a relational contract) to train and co-manage the delegated policy. Or, before delegating wide policy domains to a relatively low-skilled sub-national government, a central government can narrow the scope of delegation and implement a relatively complete and incentive contract, the performance of which can be the basis of wider delegation (see the Italian case). In any case, the most effective contract depends on the experience

accumulated by the parties. As a result, the contract may need to be revised over time.

Second, in a dynamic learning environment, experimenting is also essential. However, before generalising contractual practices, it may be useful to test and learn on specific cases.

Third, as contracts are learning tools, audit mechanisms should not only aim to verify that the parties comply with their obligations, but it should also assess the performance of the co-ordination among the levels of government.

3.2. The degree of complexity of the delegation

The policies that a central government can assign to sub-national institutional levels display different degrees of "complexity". Complexity refers here to the number and interactions existing among objectives and tasks. For example, managing unemployment is a complex policy domain since it involves policy actions in very different domains (*e.g.*, education, the labour market, industry dynamics, etc.) to reach a wide set of objectives which also interact (level of unemployment for various sub-categories of workers, level of income, etc.). By contrast, building infrastructure like a road or a bridge tends to be a less complex policy domain, even if it is a technically sophisticated operation. Complexity impacts on contracts because it is difficult to observe behaviours and to verify commitments when complexity is high.

Complexity depends upon the nature and upon the scope of the political domain associated with the delegation or co-operation. In a democracy, elected officials have to transpose political programmes chosen by the citizens into policy goals to be reached (objectives), which in turn have to be translated into actions to be implemented. Complexity is then linked to whether the relationship among the levels of government concerns the settlement of the objectives or the implementation only. Moreover, in some domains, the link between objectives and actions is clear and straightforward (*e.g.*, infrastructure development is strongly linked to the financial means dedicated to its construction). In other it is fuzzy because policy actions can have side effects and because they can be inter-dependent. In this case, several options are generally available to reach a goal (*e.g.*, the reduction of air pollution in urban areas can be achieved through bans of automobiles in city centres, on the reduction of CO_2 emissions by vehicles, and also on a mix of these and other strategies) and the policy goal (reduction of air pollution) is not independent of other goals (*e.g.*, growth, equitable distribution of income, etc.).

Complexity impacts both on the ability to write a complete contract and on the enforceability of contractual commitments. The greater the complexity,

Box 1.2. **Degree of complexity and types of delegation: the Italian example**

Italy has opted in particular for two types of contracts that illustrate well the contrasts between complex and simple projects and how contracts can be adapted to each situation.

First, the ways negotiated programmes organise evaluation (with top-sliced funds and mid-term evaluations and comparisons between the relative performances of the regions) indicate that these were explicitly built to deal with complex matters. Significantly, these programmes have integrated several tools of structural development policies and concentrated on a single developmental goal. In other words, these programmes have explicitly chosen complexity rather than simplicity. This can be interpreted as follows: 1) simplicity is always difficult to obtain; and 2) to accept complexity and to put complexity in the forefront means that central government remains involved in the game. It will not only control the realisation of the programme but also participate in its elaboration (through co-operation).

By comparison, Programme Contracts (*Contratto di Programma*), as well as Location Contracts, recently instituted, are built to deal with "simple" projects: they are aimed at promoting investments of relevant dimension with an anticipated high financial, economic and occupational impact and are mostly based on "top down" programming principles.

the harder (more costly/longer) it is to assign quantifiable objectives *ex ante* and therefore to establish the relevant information which will be required *ex post* to evaluate the behaviour of contracting parties (see Box 1.2):

- When the relationship between the two levels of government refers to a policy that is simple to implement, complete contracts can be used because a set of precise, non-ambiguous and controllable tasks to be realised without fearing interactions among them (and with the decision made by the central government) can be established. Transport infrastructures, schools and hospitals or garbage collection and road repair belong to this category.
- Alternatively, complexity increases when co-ordination is about "soft" tasks, such as mental health and childcare, support to innovation, promoting economic development, increasing the well being of the citizens, or reducing local unemployment. In these matters, policies are not easy to establish and describe. Each area corresponds to wide set of policy targets and multiple implementation tasks. As a result, it becomes difficult to establish a list of observable and "measurable" targets.

The greater the complexity, the harder it is therefore to implement a complete contract controlling *ex ante* the behaviour of parties. In case of delegation, the central government might therefore be led to implement an incomplete contract theory (ICT) type of contract by which the sub-national government is responsible for the implementation. However, since the policy domain is complex not only in terms of the action to be taken but also the policy objectives to be targeted, ensuring compatibility between national goals and sub-national implementation implies choosing an effective local implementation scheme. Implementing an ICT type of contract therefore requires a high level of expertise from both sides. As a result, the use of relational contracts may be preferred in many circumstances.

What separates complex and simple transactions is therefore the ability to credibly and precisely commit *ex ante* on *ex post* verifiable tasks/targets. Contracts must also be checked to assess if they create a multi-task problem – that is a situation in which the agent is asked in to perform more than one action or to target more than one goal. In presence of multi-tasking, incentive mechanisms may have pernicious effects:

- If some of the targeted actions/objectives are more "measurable" than others, there is a high risk the agent will focus only on these more "measurable" objectives.
- If some of the targeted actions/objectives are less costly than others, it is likely that the sub-national government will focus on them.

At first sight, it would be preferable for a central government to divide complex policy domains in sets of simple tasks and to delegate only simple tasks to avoid the problems raised by loose objectives and multi-tasking. However:

- First, if the central government really lacks information about the local specificity, it would be difficult (costly) to acquire the necessary information to translate generic political goals into concrete simple operations.
- Second, whether or not the costs of "translation" are bearable, if the problem is really of a complex nature, the sub-goals would be inter-dependent. This reintroduces the multi-task problem: the sub-national authority would be likely to focus on the commitments that are the easiest to fulfil.
- Third, (administrative) transaction costs could become prohibitive with the multiplication of contracts.

Complexity tends therefore to be a non-reducible type of problem. Moreover, most public policies interact in a complex way, highlighting a kind of "super-complexity" that frames the performance of any policy. It is clear, for instance, that public order is dependant both on the security policy, but also

on education, employment, urban and territorial development policies. The difficulty for a central government is that delegation does not – or rarely – concern a single task. Most of the time, wider policy prerogatives are delegated to lower levels of government. Some are simple and independent and can be associated to measurable objectives. Others are complex and interacting with other policy domains. No precise objectives can be associated to them. In the latter case implementing incentive contracts (either complete or incomplete) might result in bad performance. Co-operation is needed.

Generally speaking, more slack is given to the sub-national authority in the presence of an incomplete contract, raising the risk of incompatibility between the national policy and the local one. By contrast, completeness raises the costs of establishing the contracts and might result in perverse effects in terms of enforcement, with the sub-national government focusing on policy targets that are the more visible and less costly to achieve.

3.3. Vertical inter-dependencies between levels of government

While levels of government are embedded in an almost endless relationship, which results in a repeated game situation, each time they interact in a policy domain they have to consider the degree of inter-dependence between their actions. This refers, first, to the clarity with which competences are assigned to the various levels of government (Section 3.3.1). It also refers to the inter-dependences that can be created in the long run by their co-operation in specific domains (Section 3.3.2).

3.3.1. Vertical inter-dependencies

Vertical dependence or independence corresponds to the degree to which the results of the decisions made by the sub-national authority depend on the decisions made by the national government independent of the domain concerned by the contract. Indeed, decentralisation and federalism do not suppress the inter-dependencies that exist among policies managed at different levels of government. This is true, for example, when the central government delegates only "implementation" tasks or when delegated tasks concern a domain – *e.g.*, unemployment – connected to other policy domains governed by the centre, such as economic affairs, taxes, education and training. The issue is therefore to determine to what extent the local and the national policies depend on each other.

The problem is as follows. On the one hand, if decentralisation implies that the results of the local policy are highly dependent upon the decisions made by the central government, then the implementation of an *ex post* co-ordination mechanism may be required to guarantee efficient mutual adjustment and co-operation. On the other hand, if the contract between the

sub-national authority and the central government is incomplete, both parties could fear an "under-investment" of the other level of government. The central government may seek to free itself from its accountability by delegating tasks to the local one. In particular, it could attempt to "free ride" on local resources, by delegating tasks without corresponding resources, or without providing the necessary accompanying measures. Alternatively, the sub-national authority could divert national support to meet specific local interests (to internalise the political benefits resulting from its policy) and try to reject the burden of the accountability of any policy failure on the central government (since through incomplete contracting its commitments can be unclear). Thus, everything being equal, an incomplete contract could be inefficient to lead both parties to credibly commit when inter-dependencies are high. Since both levels of government might manipulate loose commitments to escape their accountability, the implementation of mutual safeguards and complete contracting could be requested.

When the contracted policy intervention can be made independent from the other actions of the central and local government, then the contract should follow an incentive logic by which the sub-national government would be the residual claimant for the implementation of the policy. If its accountability is high, and if it's needed due to the other characteristic of the transaction, then an incomplete contract should be implemented. If its political accountability is weak, then a complete contract has to be preferred.

In other words, potential vertical inter-dependencies among policies raise issues of potential distrust between levels of government that might use decentralisation policies to escape from their political accountability and pursue their own "local" objectives. This therefore raises the issue of the credibility of potential guarantees that can be implemented in the contract, while the ability to credibly mutually commit is linked to the actual degree of separation of power between the levels of government. Since the latter depends on both the design of the institutional framework and upon the clarification made though contracts, there is a "dog and tail" issue generating cumulative effects.

The larger responsibilities clearly assigned to the sub-national government, the higher the degree of independencies between the two levels, the easier it is to implement an incomplete contract. By contrast, the narrower the responsibilities assigned to the local government, the more likely it is to observe the persistence of complete contracts and of dependence. Thus, the higher the number of tasks/decisions assigned to the sub-national levels of government, the lower the vertical inter-dependencies and the easier it is to decentralise additional tasks on the basis of incomplete contracting assigning large responsibilities to sub-national government. This is obviously reinforced by the associated learning effects mentioned above.

It follows that the optimal contractual practices in an already highly decentralised country might not be efficient in a country that is highly centralised. Thus, contractual benchmarking across countries can be misleading if these dynamic and structural effects are not taken into account.

3.3.2. Temporal inter-dependencies

The temporal dimension relates to the duration of the potential inter-dependence between the two levels of policy making. Many public policies have long-term persisting influences. First, because public policies contribute to the production of institutional frameworks; they structure the environment of many collective and economic activities. Second, when public policies do not target the building of intangible assets in a society, they nonetheless may impact on them. For instance, employment policies impact on individual's skills and therefore influence the long-term employability of the workforce.

The contracting parties cannot ignore therefore the long-term effects of their present policy decisions. In particular, a policy chosen by the sub-national government influences the future set of strategic choices available to the central government. In effect, it affects the local capabilities to manage decentralised public policies and therefore influences the possibilities and the costs of future de/centralisation.

Like vertical inter-dependencies, temporal ones depend on the degree of accountability of the levels of government. When, the sub-national government is less accountable than the central one, it can behave sub-optimally because it anticipates that the citizens will consider the central government either as responsible (for an inefficient decentralisation policy), or as the last recourse for solving the induced problems.

Let us consider two examples. First, an opportunistic or inexperienced sub-national government can implement a policy that generates dissatisfaction in the public. In the short-term, the local policy makers may be "punished" and, as the long-term consequences of the poor policies emerge, citizens may mistrust decentralisation policies, thus hampering in the central government's inability to decentralise further – and might even result in recentralisation. Second, the sub-national government can choose to invest in infrastructure that would be costly to maintain *ex post*, or decide not to maintain optimal infrastructure under its responsibility, because it knows that in the last resort the central government will eventually maintain or invest in its place if the citizens consider that the decentralisation failed.

Given these elements, and especially when local accountability is low, the central government can fear being committed in the long run by the local policy of the sub-national government. It is therefore encouraged, everything

being equal, to implement complete contracts to reduce the risk of sub-optimal behaviour by the sub-national government.

3.4. *Enforcement context*

Enforcement mechanisms determine the incentives of parties to comply with their contractual obligations. They rely on supervision and retaliation capabilities. To a large extent, the institutional framework results in an enforcement context since it determines both the efficiency of oversight of the relationship between the parties and the credibility of the retaliations they might expect in cases of detected infringement of their obligations. In the context of contract between levels of government, enforcement depends both of the organisation of the (administrative) judiciary (Section 3.4.1) and of the clarity of the assignment of political accountability among levels of government (Section 3.4.2).

3.4.1. *Judicial enforcement*

The realisation of the objectives set by the contract has to be verified and enforcement or supervision mechanisms have to be incorporated in the contract. These mechanisms may be internal to the contract (performed by the parties) or involve an external supervisor, hereafter referred to as a "judge". Control is internal when the parties are able to check each other behaviours.

The mechanism relies on the capacity to retaliate against the other party when the other party opportunistically does not fulfil its obligation. In certain political regimes, the central government can legitimately punish the sub-national government while the reverse is not true. In these cases, since sub-national governments are not protected against unilateral action by the central government, the former cannot take for granted the commitments the latter has made. Alternatively, in other regimes, each level of government possesses means of retaliation. This can result in a situation of "balance of terror" in which neither of the parties is motivated to engage in conflict. Contractual commitments are therefore poorly credible in the absence of a third-party enforcer.

A "judge" who externally supervises the behaviours of the parties may be considered as the guarantor of the credibility of the mutual commitment. The role s/he plays depends on the nature of the contract. When contracts tend to be transactional, the "judge" need only evaluate *ex post* if these duties have been enforced. This is made easy because parties agree *ex ante* on the *ex post* evaluation criteria to verify and measure completion of contractual duties (meaning that the parties anticipate the capacity of a third-party supervisor and design their contract accordingly). By contrast, in relational contracting,

enforcement is more delicate, especially since mutual obligations can evolve through time. The absence of precise *ex ante* objectives and *ex post* evaluation criteria change the role of the supervisor. Rather than evaluating the performance of the parties, the "judge" has to assess whether the parties have enforced the spirit of their commitments by staying co-operative. This raises issues of "interpretation" that are not resolved by formal procedures and criteria. Therefore, when the nature of the relationship (complexity, uncertainty) imposes relational contracts, external control by the judiciary may not be efficient. Incentives to fulfil obligations can then be better provided by supervision and retaliation by both peers and citizens. Put another way, political accountability may lead to strong incentives to fulfil obligations.

3.4.2. From legal enforcement to political accountability

Different illustrations can be provided to show how political accountability, here understood as supervision/punishment by the citizens, may substitute for third-party oversight. Recent "constitutional" reforms have been implemented, with the purpose of facilitating the control of the implemented policies by citizens, either on the local or on the national level. The purpose is to allow citizens to observe the behaviour of local and central government, and to express their views. Such mechanisms are not legally binding for governments, but they nonetheless allow citizens to "voice" their opinions (see Hirschman, 1970) and to influence the making and the diffusion of reputation effects among citizens. In democratic regimes, authorities are sensitive to these effects and they might motivate them to act the right way. However, it remains possible to attempt to manipulate public opinion and transfer the burden of the accountability to the other levels of government when problems are complex and the distribution of responsibilities is fuzzy. By making the informational environment more transparent, the mechanisms described below make these manipulations relatively more difficult and costly.

First, many reforms have facilitated the access to public services and tried to modify the relationship between citizens and public services providers by concentrating public services providers in one location ("one-stop shops"). Furthermore, several countries have created citizens' or public services user's charters (the Public Services User's Charter [Belgium], the Public Service Charter [France], the Public Service Quality Charter [Portugal], and the Citizen's Charter [UK]). The terms employed reveal that these charters basically concern the citizen in his/her limited role as the consumer or respectively user of services, and sometimes as co-producer. These charters were designed as a tool to influence the degree of responsiveness of public services, but often create the impression of being used for the purpose of

administrative control rather than for establishing an open democratic administration.

Second, decentralisation results in higher accountability of the sub-national level of government. Between 1994 and 1996, the California Constitution Revision Commission (CCRC) worked on the possible revision of the governmental institutions in California. Among the different recommendations, the CCRC insisted on the link between decentralisation and accountability by positing that is necessary to "improve accountability and responsiveness of government at all levels from the state to the smallest community" (CCRC, 1996).

Third, the introduction of the "new council constitutions" in England was aimed at revitalising local democracy "by providing clear and readily accountable leadership, capable of speedier and more decisive decision making. At the same time, the government sought to reconnect councillors with local people by emphasising the importance of representation. A separation into two kinds of councillor roles was introduced: that of executive members, primarily concerned with setting policy; and that of non-executives, mainly concerned with reviewing and scrutinising decisions." (United Kingdom, Office of the Deputy Prime Minister, 2005; see Box 1.3).

When delegation involves complex tasks and/or a complex environment and thus when it takes the form of incomplete contracts, then political accountability has also to be decentralised. In effect, when delegation is complex, the actions of the sub-national government are not easily verifiable. Thus, there is no way to reward or punish a government according to its performance except by deciding whether or not to re-elect it. Then, to grant electors of each region or locality the power to decide the government's re-election increases political accountability and thus enhances the government's incentive to act in the interests of the citizens of that region (see a formal and more complete demonstration in Seabright, 1996).

Importantly, political accountability also depends on the citizens' beliefs concerning who should be in charge of solving various collective problems. These beliefs are hardly able to be manipulated by the governments and thus constrain the capacity of the central government to delegate tasks to a sub-national government. In turn, sub-national governments can rely on contractual commitment to be protected against the discretionary power of the central government (in the framework of an incomplete contract setting mutual obligations), if and only if constitutional and contractual arrangements make clear for citizens how responsibilities are split and/or shared.

On the margin, mechanisms can be implemented to make the commitments and actions of both parties more visible. It is clear, however,

Box 1.3. **Overview and scrutiny in England: "external" supervision and political accountability**

The Sub-national Government Act 2000 in England modified the way powers are divided at the local level. Among the changes this Act brought about, one can find provisions regarding "overview and scrutiny". Interestingly, the councilors in charge of this double function are not involved in decision making: "Across all four models of political management the principle underlying overview and scrutiny is that a decision should not be scrutinised by a person who was involved in making that decision" (Gains, Greasley and Stoker, 2004, p. 10). On one hand, one may be tempted to interpret the reform as a move towards external supervision. In fact, the evaluation of the reform insists on that point: non-executive councilors contribute to the improvement of public policies "through trying to influence decision makers through evidence and debate" (*ibid.*). The reform thus illustrates that the role of non-executive external "supervisors" is to improve the debate around public policy issues. "Overview and scrutiny" are thus moved closer to political and democratic debate than pure external supervision. One of the results of the reform seems to be that overview and scrutiny by councilors has indeed resulted in policy changes. From the perspective suggested in this paper, it may well be that "political debate" is more efficient than supervision when complex matters are at stake.

Source: Gains, Francesca, Stephen Greasley and Gerry Stoker (2004) "A Summary Of Research Evidence On New Council Constitutions In Sub-national Government", ELG Research Team, University of Manchester, mimeo, 24 – see also *www.elgnce.org.uk*.

that the primary is the citizens' beliefs and the constitutional logic. Indeed, it also influences the ability to benefit from an independent third-party enforcer. In unitary states, however, it is always possible to increase the independence of relevant courts and political accountability by implementing *ad hoc* constitutional mechanisms reinforcing the independence of supervision mechanisms and the transparency of public decision and action.

3.5. A typology of co-ordination contexts

In developing a typology of co-ordination contexts, four elements have to be emphasised (see Table 1.2).

- The ability to implement a complete/transactional contract strongly depends upon the central government's knowledge about the local needs and the local implementation constraints. When it is not skilled the contract that links the centre to the periphery is necessarily incomplete. It can however include a revelation mechanism, which may allow designing complete contracts in the future. The level of competences and information

of the sub-national government is of similar importance. When it is low, the purpose of the contract is no longer to use a perfect incentive scheme to control its behaviour, but rather to improve the sub-national government's competence and knowledge. When both parties are equally unskilled and uninformed, the issue is to co-operate and share information, not to tightly control each other, but to co-ordinate efficiently, learn and innovate. In any case, lack of information and knowledge prevents implementation of "optimal" incentive/revelation schemes guaranteeing *ex ante* efficient co-ordination *ex post*.

Table 1.2. **A typology of co-ordination contexts**
(Where CG means Central Government and SNA is used for sub-national authority)

Dimension	Possible values	Interpretation
Knowledge distribution (discrete variable) (central/sub-national government)	HH	Both parties are equally skilled. The CG decentralises to benefit of the SNA private information and specific skill. It fears opportunistic behaviour by this later.
	HL	The CG decentralises to empower the SNA. It may fear its lack of capability.
	LH	The CG decentralises to benefit of the SNA's skills in one domain in which it is unskilled. It fears potential opportunism, but can learn from the SNA.
	LL	The CG experiment and innovate with a SNA.
Complexity (continuous variable)	High	The CG delegates wide policy domains.
	Low	The CG delegates restricted prerogatives.
Vertical inter-dependencies (continuous variables)	High	The output of the policies/tasks delegated by the CG remains highly dependent of the CG's overhaul policy.
	Low	The actions delegated and taken locally result in local outcomes, with little impact on the overhaul national performances.
Enforcement context (discrete variable)	Unitary Regime	Neither the SNA, nor the judiciary, are independent from the CG. In turn the SNA's political accountability is low. The SNA can hardly be contractually protected against the CG potential opportunism.
	Unitary Regime with Administrative Court	Being dependent of the CG, the SNA's political accountability is low. However a skilled and independent court can protect the SNA against the potential opportunism thanks to formal means.
	Federal State without adapted Administrative Justice	Being granted with clear responsibilities the SNA is independent of the CG. Both parties cannot rely on an adapted judiciary to oversight their contractual commitments. Only political accountability is really operational. Contracts clarify the relationships but cannot be enforced strictly speaking.
	Federal State with Administrative and Constitutional Court	Being granted with clear responsibilities the SNA is independent of the CG. Both parties can rely on independent and efficient courts and political accountability to have their mutual commitments enforced.

- Generally speaking, complexity calls for more relational and incomplete contracts. There is however strong path dependence in the ability for a central government to delegate complex tasks to the local one. On the one hand, the central government can contractually assign wide responsibilities to the sub-national entity only if it is accountable and skilled enough to efficiently manage them. On the other hand, the less skilled and the less accountable the local government, the narrower the contractual delegation, which calls for complete contracting.
- Strong vertical and temporal inter-dependencies – *i.e.*, the sensibility of the results of a sub-national (respectively national) policy to the policy carried out by the central (respectively sub-national) government – favour the implementation of relational contracts. But, in a rather unitary state, inter-dependencies tend to restrain decentralisation policies and to favour the simple delegation of implementation of tasks to lower levels of government through complete contracting.
- The government's ability to mutually commit and therefore to implement contracts that protect it against *ex post* contractual hazards depends upon the quality of the institutional environment. The latter is a complex matter because it depends both on structural factors that are only slightly manipulable by the government in the short run (citizens' beliefs and the nature of the constitutional regime) and upon factors implemented in the constitutional design (in particular the organisation of a skilled and independent administrative/constitutional courts) on which the government can act, but that nevertheless requires time to reform and to build capacities.

4. Choosing contract designs

This section analyses the best contracts that can be designed to address the continuum of situations ranging from very simple co-ordination problems to highly complex ones identified above. It will be shown that that there exists a continuum of available contractual forms – from transactional to relational contracting (see McNeil, 1974) – by deconstructing the contracts into decision-making mechanisms and enforcement mechanisms and pointing out the benefits and the costs of alternative designs. This analysis will make clear the relationship between the typology of co-ordination contexts and the more efficient contractual solutions.

It must be highlighted that there are clearly two contrasted co-ordination logics – transactional and relational – leading to contractual mechanisms that rely on very different perspectives of the main issues to be addressed. However, most co-ordination situations mix these two logics. The design of an efficient contract among levels of government should therefore be based on an

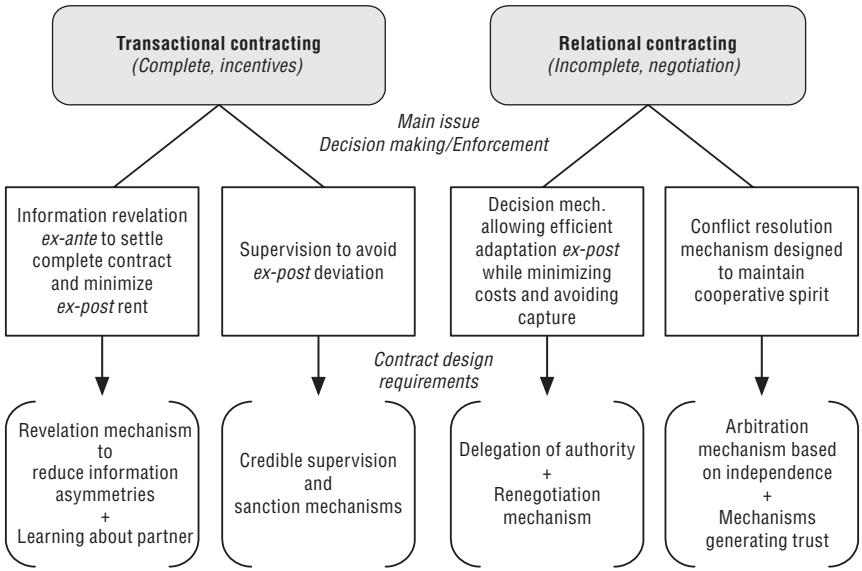
in-depth understanding of the situation and of the goals of the contract (*e.g.*, is it to control or to empower the other level?). The detailed economics of contractual logics described above should allow decision makers to identify the main dimensions that should be taken into account.

In brief, transactional contracts correspond to market-like exchanges. These contracts are thus used to solve the problems that occur when the informal rules (beliefs, moral rules, etc.) that exist in a society are not sufficient to allow the spontaneous co-ordination of individuals' plans of action. Thus, individuals use transactional contracts as co-ordination devices that rely on the formal institutional framework – namely the law and the judiciary – and complement it. Provisions are then established through negotiations that only relate to what is specific to the transaction. The rest of the exchange relies on the existing formal rules. A contract tends to establish a list of tasks contingent to each other and to external events to be fulfilled by the parties.

In contrast to transactional contracts, relational contracts correspond to agreements settled between parties engaged in a long-term process of co-operation. Parties know that they are complementary and that co-operation could result in increased wealth. However, due to a long time horizon and to the fact that they cannot figure out *ex ante* what will result from the co-operative process, they are unable to state the precise goal of their interactions and, therefore, even less able to anticipate all the concrete problems they will have to solve *ex post*. From this perspective, the role of the contract is not to establish detailed list of actions to be taken by both parties, but rather to create a governance framework that will allow co-operation. The contract then tries to build a virtuous circle based on the building of trust and mutual confidence, through the permanent enhancement of the governance mechanism and the development of common knowledge and the production of mutually beneficial outcomes. The mechanisms that are needed in the two situations are therefore different and summarised in Figure 1.1.

The analyses is organised as follows: First the contractual tools used to monitor the behaviours of the parties and to lead them to efficiently share information and knowledge are analysed (4.1); second, enforcement mechanisms are investigated (4.2). The typology of co-ordination features is matched with the resulting typology of contracts in the concluding Section 5.

Figure 1.1. **Transactional *vs.* relational contracting**



4.1. The organisation of decision making and information sharing

Contracts are designed to organise decision making and information sharing. More precisely, there exists a continuum of contracts that depends on what the central government decides to decentralise:

- A complete incentives scheme: the central government chooses the objectives and only delegates decisions of implementation (the means) to the sub-national government.
- An optimal incomplete contract: the central government delegates a larger share of the policy making to the agent who in turn chooses the sub-goals of a policy in addition to the way of implementing it. The principal's problem is to decide on the degree of control to be attributed to the sub-national government and the re-negotiation procedure to be established to re-negotiate both parties' commitments.
- A relational contract: the policy goals as well at the implementation procedures are chosen in co-operation. The contracts rely on a negotiation structure.

It must be emphasised that this continuum corresponds to different forms of delegation. In the first two situations, objectives are set at the central level as well as (at least part of) the implementation (Section 4.1.1). In these situations, the problem for the central government is therefore to design mechanisms that optimally frame the sub-national level of authority

(Section 4.1.1.1). In a dynamic perspective, the sub-national government should reveal information to enable the central government to design optimal monitoring mechanisms (Section 4.1.1.2). These two situations correspond to delegation. The third situation corresponds to the establishment of a co-operative framework in which the parties negotiate both the objective and the implementation. The problems are then radically different since the issue is to guarantee efficient information sharing and decision making in a co-operative setting (Section 4.1.2).

4.1.1. Delegation: degree of assignment and information revelation

4.1.1.1. The dilemma of authority delegation. Delegation may or may not imply the transfer of authority and discretionary power to the agent (that is, to the sub-national government). When no authority is transferred, the central government chooses both the objectives and the means of implementation. By contrast, the transfer of a part of the central government's authority means that a right of control over means and or policy variables is transferred to the agent.

The choice between transferring or not transferring authority to sub-national governments depends on a cost/benefit analysis. It may be beneficial to give prerogatives to an agent to benefit from the gains that come from an increased motivation and more accurate information to design and implement objectives and solutions. The transfer of authority may also be useful because it reduces the *ex ante* costs of designing a complete contract and reduces the costs of *ex post* control. However, granting an agent with authority is costly: it increases the loss of control. The variables that have to be taken into consideration are the degree of complexity of the task to delegate, the inter-dependency between the principal and the agent, and the asymmetries of information or of expertise that exist between them.

Then, the reasoning is as follows: when the complexity of delegation is low, inter-dependencies are low and when there are no asymmetries of expertise, then no authority has to be transferred. The central government is sufficiently skilled and informed to determine *ex ante* precise objectives to reach, to evaluate the costs that the sub-national government will incur in the realisation of the objectives and to set control variables that will be checked *ex post*. By contrast, when complexity is high, inter-dependencies are low and asymmetries of expertise important, then the central government may have difficulties in implementing a complete contract. Then authority has also to be delegated to the agent. In this context, the central government can use two forms of incomplete contracts. First, an incomplete contract in which the control over means only is delegated; the central government defines the objectives to be reached by the sub-national government, which in turn

chooses means. Second, in an incomplete contract the central government delegates the choice of local objectives and of their means of implementation.

When complexity increases, authority has to be transferred, while the difficulty to contract on precise objectives leads to granting the sub-national authority with discretionary power. In the most extreme cases, the principal and the agent know that the contracted targets do not summarise the expected performance since it is particularly difficult to turn a complex set of objectives into criteria of performance. Targets can nonetheless be set in the contract with the purpose of structuring a dialogue between the parties to make the sub-national government aware of the expected outcome of the policy. It is also the basis of an *ex post* dialogue about the assessment of the agent's and of the policy's performance. In such cases, quantitative targets should be only used to structure the dialogue between the principal and the agents. This type of situation can generate specific contracts in the continuum between transactional and relational ones. It is for instance the case in Italy (Barca, *et al.*, 2004) where this type of transactional contract, for which commitments concern final objectives/actions that the parties are supposed to achieve/perform, is attached to open-ended clauses. This makes the contracts non complete since both parties just have partial information. These contracts have transactional features (leading for instance to bonus and sanction mechanisms attached to performance). However, because there is a need for implementation of the contracts in order to know better the real meaning of these "open ended clauses", they also exhibit features of relational contracts, allowing production of knowledge to both parties as a result of co-operation.

When the discretionary power of the agent increases, dialogue becomes prominent and concerns all dimensions of the co-operation. It goes far beyond the simple dialogue around the objectives and their measurability. Formal procedures of information sharing and collective decision making must then be implemented. There is therefore a shift in which the notion of delegation loses its very meaning since the parties tend to be equal and linked by their joint involvement in a co-operative process. The purpose is no longer – as in transactional contracting – to motivate the agents to use their private information for the benefit of the principal, or to minimise its information rent. The purpose is now to combine cognitive assets to design and manage innovative projects, or at least to build procedures to share information that was previously unknown by the principal and by the agent and to build common knowledge and competences.

4.1.1.2. Revelation and incentive mechanisms. Since the central government often leads decentralisation policy in a long-term perspective, the choice of the optimal contract at a point of time depends upon the path of

development it wants to promote, and especially the learning effect it would like to guarantee.

The central government's lack of knowledge may prevent it from implementing a complete contract when, everything being equal, it would be optimal. It can therefore be optimal to implement an incomplete contract, and to audit its implementation carefully, not to avoid shirking by the concerned sub-national authority but to learn what actions are required and what verifiable objectives can be implemented in more complete contracts with other sub-national authorities. This will happen when the central government is unskilled as compared to the sub-national authority in terms of the local implementation of a national policy. Such learning strategies are of course more useful in a national setting when sub-national authorities face comparable local situations in the targeted public policy.

The sub-national government's lack of knowledge may prevent the central government from implementing an incomplete contract when, everything being equal, it would be optimal to do so. It can therefore be useful to design a more complete contract aimed at progressively delegating authority in the course of the contract completion. The central government, in that case, trains the sub-national one and increases its delegation of authority, if and only if it assesses that the sub-national government has developed its skills and implementation capabilities. The progressive assignment of increasing power to the sub-national authority is a strong incentive for the sub-national government to learn. In addition, the central government learns a lot about the local constraints of implementation, which enhance its ability to design, and supervise *ex post* delegation contracts.

4.1.2. Negotiation procedures

When complexity is high – that is if both the central and the sub-national government do not know (at least partially) how to accomplish their respective tasks, how to translate them into clear and easily verifiable objectives and which means have to be used to reach the general policy objectives chosen by their constituencies – as well as when the levels of policy making are highly (vertically or temporally) inter-dependent, then the parties have to establish a device that allows common decision making, dialogue and collective innovation (as illustrated by the provision of health services in Minnesota, see Box 1.4).

The design of an optimal common decision-making mechanism has to take into account that co-decision certainly favours information sharing, mutual understanding and generates trust but it also leads to the duplication of cognitive efforts and slows down the making of decisions. In addition, it can lead to strategic behaviour aimed at transferring the burden of the decision

Box 1.4. **Dialogue between levels of government in the provision of health services**

Through the Community Health Services (CHS) partnership, state and local public health departments share authority and responsibility for protecting public health in the State of Minnesota. *Minnesota Statutes Section 144.05* describes the commissioner of health's general duties and Chapter 145A describes the purpose of the Community Health Boards. These two sections of statutes highlight the inter-dependency of state and sub-national governments in meeting their public health responsibilities:

The commissioner of health has statutory authority relating to several environmental health programmes. Through the *Food, Beverage and Lodging (FB&L) Delegation Agreements,* the commissioner may delegate his authority for inspections of food, beverage and lodging facilities to a CHB. The standard FB&L agreement was developed collaboratively by the MDH and the State CHS Advisory Committee.

State government

"The state commissioner of health shall have general authority as head of the state's official health agency and shall be responsible for the development and maintenance of an organized system of programs and services for protecting, maintaining, and improving the health of the citizens…" (MN Stat. 144.05). The state also plays a critical role, both in monitoring county responsibilities and also in ensuring that sub-national governments have the resources they need to carry out those responsibilities.

Mutual accountability for public health means that the state must: clearly and consistently communicate the legal expectations of the sub-national government and the benefits of maintaining a strong public health system; work with sub-national governments to identify effective tools for management; and assist sub-national governments to secure the financial resources necessary to effectively protect and promote the public's health.

Sub-national government

"The purpose of sections 145A.09 to 145A.14 is to develop and maintain an integrated system of community health services under local administration and within a system of state guidelines and standards." (MN Stat. 145A.09) When counties form Community Health Boards, they retain their sub-national governmental responsibilities for basic health protection. In addition, they are required to assess the health problems and resources in their communities, establish local public health priorities, and determine the mechanisms by which they will address the local priorities and achieve desired outcomes.

The commissioner of health also may direct local health boards to take public health action. For example, in the case of communicable diseases, "a board of health shall make investigations and reports and obey instructions on the control of communicable diseases as the commissioner may direct…" (MN Stat. 145A.04, Subd. 6). In addition, the commissioner may enter into formal or informal agreements with local agencies, such as when the commissioner delegates duties to CHBs (MN Stat. 145A.07).

The ability to define shared roles between state and sub-national government has eliminated duplication of efforts and seems to have provided a cost-effective means of delivering public health services that are customised to meet the needs of local communities.

making and of the costs of implementation to the other party. The optimal solution is therefore to implement a revisable negotiation procedure. In the course of the development of the project, one of the goals of negotiations should be to specialise the parties in decision making by delegating authorities between the two of them, and designing mutual reporting procedures to guarantee a continuous accumulation of knowledge.

4.2. Enforcement mechanisms

Enforcement mechanisms are totally different in delegation/transactional (4.2.1) and in co-operation/relational contracting (4.2.2).

4.2.1. Incentives/penalties and supervision (for enforcing delegation/transactional contracts)

In transaction contracts, verifiable objectives are assigned to the sub-national government. The principal who designs the contract seeks to minimise the cost of the incentive mechanisms implemented in the contract in order to motivate the agent to follow the contractual requirements. First, he balances the cost of a positive incentive scheme with the costs of a loss of control (Section 4.2.1.1). Second, he balances between cost of supervision and the implementability of possible sanctions (Section 4.2.1.2). In addition, he can rely on the fact that he plays a repeated game, or that he faces several agents to reduce the cost of the incentive mechanism.

4.2.1.1. Designing optimal incentives/revelation schemes. In the Incentive Theory framework, enforcement rests on the idea that, since the principal is unable to observe (at no cost) variables that are essential

for co-ordination – like the quality of the service provided by the agents – and since it is costly to extract information from the agents by audit, the principal can nevertheless get information that is influenced by the behaviour of the agent, albeit randomly.[3] On this basis, he is able to design an optimal incentive/revelation scheme, by which the principal motivates the agent to behave efficiently and to reveal information in exchange of a reward.

The optimal reward is determined by taking into consideration that central and sub-national governments are engaged in repeated interactions. Then, in the first period, the central government provides the sub-national authority with a certain amount of money. The agent has to be the residual claimant its effort in the first period as it leads him to behave efficiently to maximise the part of the grant that can be used for other purposes than those set by the principal. The principal then observes how the grant was spent and the results. The central government does not only benefit from the increased motivation of the agent, but also from the information about his true costs to provide a certain level and quality of service. In a second period (and for the

each repetition of the situation), the principal can design a complete incentive contract since he knows how to compensate precisely the sub-national government for his efforts. The "optimal" grant is then provided if the sub-national authority reaches certain observable objectives.

The risks of this revelation strategy arise from the fact that the information gathered during the first period is used by the central government to reduce the slack which benefits the agent. The latter is then led to hide information, which deprives the centre from any benefit. It is therefore a better strategy for him to capture part of this slack only. If at later periods the central government provides grants that are a bit above the one that just compensate the agent's efforts, the latter can confidently reveal part of its information by maximising its efforts (therefore minimising its costs) and spending the difference between the grant and its costs for other purposes. Since in the real world, the likelihood of learning everything that is relevant – *i.e.*, the relevant cost function of the agent – in one (contract) period is low, the central government's optimal strategy is to repeatedly contract on the basis of the same principle: one grant, a set of observable targets, an obligation to report. Of course, each time the contract is renewed, the new level of grant should be based on the knowledge accumulated in the previous period so as to leave a rent to the agent, but a smaller one from period to period.

The game between a central government and a sub-national authority as it has been described in the preceding paragraph can also be understood as a game between the central government and different sub-national authorities. In that case, what the central government learns from the interaction with one sub-national government can be used to implement an optimal incentive scheme when interacting with other sub-national governments. As a result, the revelation/capture dilemma is softer than in the repeated game. At the same time, the central government can adopt this strategy if and only if the concerned policy can be implemented the same way in the different sub-national jurisdictions.

This leads us to consider another type of self-enforcing incentive scheme: yardstick competition. This is a process by which the central government has no need to extract information. It compares the relative performances of the sub-national authorities. The advantages are twofold. First, it can rely on easily observable variables, and if the competition among the sub-national government is strong, no information rent is left to the agent because the latter is motivated to do its best and because the principal's supervision costs are low because assessing "relative" performance is much easier than measuring individual performance. Second, the penalty/reward system has no cost for the principal. If he knows what the average productivity of its agents should be – *i.e.*, the average cost for the targeted level of public service – then it can provide the more efficient sub-national governments with bonuses by

removing penalties from the grants paid to the low performing sub-national authorities (see the example of the EU Structural Funds; Box 1.5).

Nonetheless, the system has limits. First, incentives would not work if the sub-national authorities were to collude; and they may be very likely to do so to avoid the negative impact of competition among them. Second, competition among sub-national authorities could be destructive, especially by ruining their ability to co-operate, which can be necessary in many policy areas where strong horizontal externalities exist. Third, yardstick competition may result in strong inequalities among levels of services across regions.

It is thus essential to point out that yardstick competition linked to incentive mechanisms should be reserved to situations in which the agents

Box 1.5. **Compared EU Structural Funds and incentives**

The evaluation of the Structural Funds allocated to the different institutional levels proposed and performed by the European Union is particularly interesting because it reveals a mix between the use of the incentive allocation of resources, evaluation (mid-term) and relative evaluation of the performance of the different regions (yardstick or benchmark). Thus, the project proposed by the DGXVI in 1998 envisaged that 10% of Structural Fund allocations was to be top-sliced and kept as a reserve for additional allocations to programmes at a later stage. Then, at the mid-term (end 2003), the programme was to be divided into three groups on the basis of a number of performance criteria (effectiveness, management and financial, criteria – see below): under-performing, well-performing, and high-performing. The Commission would undertake the ranking on the basis of implementation and mid-term evaluation reports. Finally, programmes would get an extra allocation from the reserve amounting to 10-20% for the high-performing ones, at least 10% for the well-performing, and 0% for the under-performing programmes. After the criticisms rose by several member states, the size of the performance reserve was reduced from 10 to 4% and to compare programmes only within member states and separately under each Objective. Member states were also given the option as to the level at which performance comparison would take place (national or regional). Three sets of criteria were to be used to measure performance, relating to effectiveness, good management and financial performance. The principle underlying the performance reserve, as outlined by the Commission was "not to penalize a program seen as being unsuccessful after several years, but to create favorable conditions to ensure that as many programs as possible are considered successful in the year 2004." (European Commission, DG Region, "Working Paper 4: Implementation of the performance reserve", The programming period 2000-2006: methodological working documents.)

are assumed to be skilled and even equally skilled. In that case, it can result in an efficient outcome. Otherwise, it could have counterproductive effects.

In addition, schemes focusing on observable variables have two limits. First, observable variables can be manipulated by the sub-national government. Second, observable variables can be equated with measurable variables (that are considered as more objective, less subject to manipulation, easier to observe). An incentive system that leads the agents to focus on measurable objectives leads them to neglect more complex prerogatives. When complexity is strong, the central government must not put too much emphasis on the performance realised on the most measurable target/tasks.

This is typically one of the problems that limit the use of benchmarking procedures. In effect, benchmarking may lead governments to focus their attention on the most measurable objectives, such as rate of growth or unemployment rate, to the detriment of alternative important but less measurable objectives such as equity, diffusion of knowledge, or environment quality.

4.2.1.2. Supervision, incentives and penalties. When the central government ignores the sub-national government's production costs and cannot ground incentives and enforcement on observable variables, it can rely on supervision or audit procedures to extract accurate information on its performance or behaviour and to prevent it from cheating. The procedures rest on the use of rewards or penalties.

However, supervision or auditing is costly. The principal has to balance the sanctions imposed on the potential cheater and the costs of control; given that higher costs of control should increase the probability of detecting cheaters. To determine the optimal supervision and audit mechanisms, then, the principal has to determine three elements that allow him to minimise the expected cost of collecting accurate information on local parameters: the frequency of controls, the size of reward, and the amount of penalty.

These different elements complement each other. Thus, for instance, a large reward for telling the truth can be offset by a very small audit probability and will thus lead to audit cost savings. Therefore, it is preferable for the central government to reward the agent when the audit costs are high and the audit procedure is costly. In contrast, when the audit cost is low, the central government may have interest to increase the probability of auditing and in offering a small corresponding bonus, rather than awarding a large bonus and auditing with a small probability (Rocaboy and Gilbert, 2004).

Major and frequently ignored aspects of evaluation are the implementation constraints. First, the nature of the contracted project influences the type of "criteria" that can be used to evaluate the

implementation of these projects. Often measurable variables are insufficiently correlated to the political objectives. For instance, the "performance reserve" scheme used both by the European institutions and Italy to motivate sub-national governments to behave efficiently focuses mainly on technical criteria that do not guarantee the realisation of the objectives. Second, measure and assessment should not be affected by the administration managing the programme. More generally independent evaluation and assessment procedures and the human resources and skills to administer the system are important constraints.

As the Austrian Federal Chancellery (Federal Chancellery, Austria, June 2003) has argued, there exists a contradiction between attempts to control the behaviour of sub-national governments by using "objective quantitative indicators" or "to use the Performance Reserve as a credible incentive for raising effectiveness". The point is that many contractual tools – and in particular the "performance reserve scheme" – is that they are used with a double purpose (in particular because regional policies are a mix of simple and complex projects): both as incentives to reach achievable and measurable targets and as learning tools.

4.2.2. Conflict resolution and last resort retaliation (for enforcing co-operation/relational contracting)

When two parties are co-operating the issue at stake is to maintain trust among the parties. Indeed, the parties are linked by a very loose and incomplete contract that does not protect them against co-ordination hazards. In particular, one of the two governments might not conform to what it promised or might attempt to capture all the political benefits from a joint project. Trust is necessary because both parties rely on information released by the other and because – unless all decisions are jointly made, which can generate inefficiency – each of the parties relies on initiatives taken by the other. In a context of innovation, therefore characterised by high uncertainty, both parties can make mistakes or decide not to disclose some information considered not essential by one party, while the other could consider it useful. There are then many chances to assess that the other party is no longer co-operative, which could engage both parties in speculations about the other party's intents, leading both to decide to stop co-operating.

To avoid such a pernicious loop of distrust, it is essential to build mechanisms aimed at maintaining trust between the parties. In many cases, distrust can derive from misunderstandings between the parties, the wrong interpretation of the other's intent, or divergent interpretation of what was brought to the "joint-venture" by each party and what both should get in

return. Three kinds of mechanisms can be implemented to try to resolve the problem of distrust:

- First arbitration can be used to solve potential conflict. In such a situation, the role of the arbitrator is not to establish responsibilities and to sentence a faulty party to paying damages. The very logic is to restore mutual trust by enabling the parties to expose their visions and to try to reconcile them.
- Second, social networks are also essential tools. Ian Macneil (1974) pointed out that a relational contract relies on social networks or other forms of networks and informal institutions because margins of negotiations and interpretations are often too wide when the contract is incomplete and only organise a negotiation procedure. Parties are seen to spend their time negotiating, and are never be able to rely on any reliable enforcement mechanism if they were to rely on contractual and legal tools alone. Social networks often establish norms and generate informal enforcement mechanisms based on ostracisation that guarantee informal conventions and also mutual commitment, because a community would consider it unfair not to conform to these norms and to not fulfil its own commitments. Co-operation between levels of government can be therefore be sustained by the existence of social networks among politicians or civil servants across the levels of government.
- Third, constituencies can force public authorities to co-operate. Again transparency provided by contract and by reforms aimed at increasing public awareness about public governance might help.

In addition it has to be considered that the relationships among levels of government are repeated, which provides an environment favourable to co-operation. There are also positive incentives to co-operate. Indeed both parties can be interested in the learning they gain from co-operation which empowers both parties and increases collective efficiency. A context of trust can thus favour the emergence of co-operation through contractual practices, especially relational ones. The repeated aspect of relationships between parties is an important factor for trustful relations that can be jeopardised by a high degree of personal mobility in institutions.

It should be highlighted that in the case of co-operative relationships, supervision should not be considered in a way to avoid deviation. It should be used as a tool to assess collective performance in order to enhance it. Thus, when vertical inter-dependencies and complexity are high, it is irrelevant to implement supervision procedures aimed at rewarding or punishing deviation from the rule. Supervision and reporting should be developed to assess the efficiency of the co-operative process and of its outcome so as to reframe the co-operation if needed, identify the successful governance solutions to test

them in other context, and make efforts to innovate in matter of inter-governmental co-ordination.

5. Conclusion: from co-ordination contexts to contractual solutions

Contractual agreements or governance mechanisms are devices that can be designed to reduce the risks and costs associated with asymmetries of information, difficulties or impossibilities to verify the behaviours of the parties, the lack of skills, and the defaults of credible commitments. Section 3 identifies the salient features of co-ordination problems that may occur when the realisation of a policy implies co-operation between a central government and a sub-national one, with the objective to draw a typology of co-ordination difficulties.

Four main dimensions/features were proposed to analyse and compare the different contexts of co-ordination:

- The distribution of knowledge among the parties. This criterion permits comparison of situations in which delegation is motivated by the willingness to benefit from the skills/information of the local authorities (HH and LH), with situations in which the central government seeks to empower the local authority (HL), with situations in which the two parties are co-operating to experiment and innovate (LL).
- The degree of complexity. When co-ordination is about complex matters – which also refer to the scope of the policy in question – complete contracting and precise control of the behaviour of the sub-national government by the centre is difficult. This leads to incomplete contracting, which can be a problem because if the contracted policy covers a wide set of domains, the slack of the sub-national authority might be too wide, especially if this is the central government which is accountable for the policy.
- The degree of vertical inter-dependence. Vertical inter-dependence may lead each level of government to use decentralisation to escape from political accountability, which favours opportunistic behaviours, either on the part of the sub-national or on the one of the central government, and generate reciprocal distrust. This problem therefore raises another one, namely the credibility of potential guarantees that can be implemented in the contract.
- The enforcement context. First, an independent and specialised judiciary is necessary to protect sub-national governments against possible deviation from its own commitment by the central government. Second, political accountability is essential to influence the ability of central and sub-national governments to enforce their mutual arrangements. What matters is that governments will be considered by citizens as accountable for the

decisions that are delegated (or not) through contracting. Sub-national governments can rely on contractual commitment to be protected against the discretionary power of the central government if it is clear to the citizens what government is in charge of what policy domain. In turn, the central government can rely on the citizens to encourage sub-national government doing their best efforts if it is clear that citizens consider the sub-national authority as fully responsible for decision making in a specific policy domain.

A given context of co-ordination can always be characterised along these four dimensions, which suggest the type of contractual solutions to be implemented.

It is important to point out that contracts can have endogenous effects on these characteristics, meaning that they might change after a contract is implemented. In particular:

- The distribution of knowledge can evolve because contracts can be used as learning tools.
- The enforcement context can also be changed because contracts are clarifying the conditions in which various levels of government interact, which impact in particular on political accountability.

Section 4 has demonstrated that different forms of contracts can be used to address the many situations ranging from very simple co-ordination problems to highly complex ones. There exists a continuum of contractual forms that stretches from transactional to relational contracts. To see how and how far these different contracts can be adapted to different contexts of co-ordination, it is important to bear in mind that transactional and relational contracts respectively rest on opposing mechanisms:

- On the one hand, the purpose of a transactional contract is to organise a simple delegation of tasks between two parties, very similar to a market transaction. A transactional contract is thus made of rules designed to solve co-ordination problems *ex ante*. These contracts are assumed to be enforceable through the use of the existing and explicit legal rules; no specific rules have to be tailored to guarantee the realisation of the mutual obligations involved by the contract. Therefore, transaction contracts are particularly well adapted to co-ordination situation in which both parties know *ex ante* – that is with a high probability or with a low degree of uncertainty – the problems to be solved *ex post*.
- On the other hand, relational contracts have to be implemented when parties are engaged in a long-term co-ordination process. They are unable to figure out *ex ante* all the concrete problems they will have to solve *ex post*. Parties should therefore build a negotiation mechanisms aimed at stating

ex post how to solve co-ordination problems, and aimed at accumulating knowledge.

Alternative ways to build these two mechanisms are analysed in Section 4. This is done through a review of contractual provisions setting and granting decision rights and/or procedures for negotiation, designing payment mechanisms, delimitating and granting audit rights, establishing conflict resolution mechanisms, etc. On this basis, a systematic link between a collection of optimal contractual provisions and various relational situations is established.

The mechanisms that can be designed to drive governments' behaviours as well as to help them to make decisions range from complete contingent contracts, setting in advance the tasks to be performed in various contexts, to very incomplete/relational contracting that design a negotiation procedure. More precisely:

- On the one hand, there is a choice among a continuum of solutions corresponding to increasing delegation of authority by the central government to the sub-national government. It ranges from a complete-contingent contract, where no delegation of authority occurs, to the delegation of authority over a whole area of policy; and goes through delegation of the simple rights to choose the policy tools or to decide how a policy should be implemented to reach objectives designed by the central government.
- On the other hand, the two governments can co-operate in the making of all decisions regarding the policy in question.

The mechanisms that have to be designed to guarantee that the parties will behave as requested by the "driving behaviours mechanisms" just mentioned above, belong to a set ranging from self-enforcing incentive scheme to arbitration mechanism. Again, implementable solutions range along a continuum of "transactional" solutions that turn to be increasingly "relational".

- In the former case, one party assigns verifiable actions or objectives to the other. In the case of an incomplete contract, these verifiable obligations are mutual. Enforcement is then a matter of cost and credibility. The central government that designs the contract seeks to minimise the cost of the incentive mechanisms implemented in the contract in order to motivate the agent to follow the contractual requirements. First, it balances the cost of a positive incentive scheme with the costs of a loss of control. Second, the central government balances between the cost of supervision and the implementability (acceptability) of possible sanctions. In addition, it can rely on the fact that it plays a repeated game, or that it faces several agents

to reduce the cost of the incentive mechanism. To do so, the central government plays on two "enforcement" logics.

- ❖ On the one hand, it relies on observable signals only to reward the sub-national government through an "optimal incentive scheme". In concrete terms: the principal acknowledges that it is costly to extract information from the agents by audit. It therefore implements an incentive/revelation scheme by which the principal seeks to get either the right action or the right revelation voluntarily made by the agent, in exchange for a reward. This reward, qualified as "information rent" by theory, is the shadow price of the information that is bought by the principal to the agent. It can take the form of a payment or of any transfer in favour of the agent; the principal can leave a rent to the agent, or he can transfer knowledge to him. The issue is then to acquire enough information to implement an efficient self-enforced incentive mechanism.
- ❖ On the other hand, the principal relies on his ability to extract information from the agent by auditing his activity. In this case the principal balances the net benefit of auditing – *i.e.*, the gains in efficiency obtained from the "right" behaviour by the agents minus the costs of investigating and rewarding or punishing the agent – with the net benefit of not doing so – *i.e.*, the results obtained when the agent does not operate and behave optimally.

- In the latter case, the mechanism aims at monitoring for the start of a vicious circle of distrust that will ruin the co-operative process. Parties should prevent conflict by deciding on procedures to share information and to collectively analyse failures. When conflict nevertheless arises, parties should agree on trying to settle them via an independent third party whose role is not to identify a guilty party and to sentence it, but to restore trust and a co-operative spirit by reconciling both parties' visions of common goals when they fail to reach them.

Table 1.3 summarises out how the various co-ordination contexts tend to favour the implementation of various mechanisms and provides a general synthesis of what has been developed in this paper. For a given a co-ordination context characterised by four "values" corresponding to each of the four relevant dimensions to describe such a context, it is possible to assess which co-ordination solutions can be implemented. It then appears that, when several co-ordination problems can receive the same solution, then a rather pure relational or transactional contract can be implemented. Alternatively, if several co-ordination solutions generate contradictory effects, then hybrid contracts, that mix relational and transactional, have to be used.

Lastly, it is important to point out that in several cases, contracts are used with the purpose to improve the set of knowledge of the parties, either to train

Table 1.3. **From co-ordination contexts to contractual solutions**

Dimension	Possible values	Contractual solution decision enforcement	Possible evolution
Knowledge distribution	HH	Complete contract *Self-enforced Incentives*	
	HL	Complete contract *Arbitrage*	Incomplete contract *Audit*
	LH	Incomplete contract *Audit*	Complete contract *Incentives*
	LL	Co-decision *Arbitrage*	
Complexity	High	Co-decision *Arbitrage*	+ Complete contract + *Incentives/supervision*
	Low	Complete contract *Incentives*	
Vertical inter-dependencies	High	Co-decision *Arbitrage*	
	Low	Incomplete contract *Audit*	
Enforcement context	Unitary regime	*Arbitrage*	
	Unitary regime with administrative court	*Supervision*	
	Federal state without court	Incomplete contract *Arbitrage*	
	Federal state with court	Incomplete contract *Supervision*	

the sub-national government, or to acquire information and knowledge from it. With the passing of time, the optimal solution tends to evolve.

Notes

1. This chapter draws on the contributions of Professors Eric Brousseau, EconomiX, Université de Paris X & CNRS, Institut Universitaire de France, and Alain Marciano, EconomiX, Université de Reims.
2. As pointed out by contract theory – *e.g.*, Brousseau (2000) – in order to sustain necessary mutual trust in the long run, parties involved in a co-operative process in which they progressively discover problems and solutions have to accept to negotiate in the course of the performance of the contract, and to implement new obligations resulting from what they learn. A negotiation mechanism has therefore to be organised both to guarantee sharing of knowledge and to progressively complete an initially incomplete contract.
3. The principal supposedly knows all the possible values of this variable (*e.g.*, the list of possible actions by the agent), the probability law by which it varies (*e.g.*, the probability that the agent will take any of these actions), and the way it impacts on the agent's wealth (*e.g.*, the net benefit for the agent of any of these actions).

Bibliography

Aghion, P., M. Dewatripont and P. Rey (1994), "Renegotiation Design with Unverifiable Information", *Econometrica*, Vol. 6, pp. 257-282.

Aghion, P. and J. Tirole (1997), "Formal and Real Authority in Organizations", *Journal of Political Economy*, Vol. 105, pp. 1-29.

Akerlof, G.A. (1970), "The Market for 'lemons': Quality, Uncertainty and the Market Mechanism", *Quarterly Journal of Economics*, Vol./No. 84, pp. 488-500.

Anderlini, L. and L. Felli (1994), "Incomplete Written Contracts, Undescribable States of Nature", *The Quarterly Journal of Economics*, Vol. 109(439), pp. 1085-1124.

Anderlini, L. and L. Felli (1999), "Incomplete Contracts and Complexity Costs", *Theory and Decision*, Vol. 46, pp. 23-50.

Arrow, K.J. (1985), "The Economics of Agency", in J.W. Pratt and R.J. Zeckhauser, *Principals and Agents: The Structure of Business*, Boston, Harvard Business School – Research College, pp. 37-51.

Averch, H. and L. Johnson (1962), "Behavior of the Firm Under Regulatory Constraints", *American Economic Review*, Vol./No. 52, pp. 1052-1069.

Axelrod, R. (1984), *The Evolution of Cooperation*, Basic Books, New York.

Barca, F., M. Brezzi, F. Terribile and F. Utili (2004), "Measuring for Decision Making: Soft and Hard Use of Indicators in Regional Development Policies", *Materiali Uval, analisi e studi*, No. 2, November-December.

Barnard, C. and S. Deakin (2001), "Market Access and Regulatory Competition", Jean Monnet Working Paper, Harvard Law School.

Baron, D. and D. Besanko (1984), "Regulation and Information in a Continuing Relationship", *Information Economics and Policy*, No. 1, pp. 267-330.

Baron, D. and R. Myerson (1982), "Regulating a Monopolist with Unknown Costs", *Econometrica*, Vol. 50, pp. 911-930.

Baron, D.P. (1989), "Design of Regulatory Mechanisms and Institutions", in R. Schmalensee and R.D. Willig (eds.), *Handbook of Industrial Organization*, Vol. II, Elesevier Science Pub., Amsterdam, pp. 1347-1447.

Baron, D. and D. Besanko (1984), "Regulation and Information in a Continuing Relationship", *Information Economics and Policy*, Vol. 1, pp. 267-330.

Baron, D. and D. Besanko (1992), "Information, Control and Organizational Structure", *Journal of Economics and Management Strategy*, Vol. 1, pp. 237-275.

Baron, D. and R. Myerson (1982), "Regulating a Monopolist with Unknown Costs", *Econometrica*, Vol. 50, pp. 911-930.

Bergvall, D., C. Charbit, D. Kraan, and O. Merk (2006), "Intergovernmental grants and decentralized public spending,"*OECD Journal of Budgeting*, Vol. 5, No. 4., pp. 111-158.

Breton, A. (2002), "An Introduction to Decentralization Failure", in Ehtisham Ahmad and Vito Tanzi (eds), *Managing Fiscal Decentralization*, Routledge, London and New York, pp. 31-45.

Brousseau, E. (2000), "Confiance ou Contrat, Confiance et Contrat", in F. Aubert and J.-P. Sylvestre (eds.), *Confiance et Rationalité*, INRA Edition, Les Colloques, No. 97, pp. 65-80.

Brousseau, E. (1993), "Les Théories des Contrats: Une Revue", *Revue d'Economie Politique*, Vol. 103, No. 1, January-February, pp. 1-82.

Brousseau, E., and M. Fares (2000), "The Incomplete Contract Theory and the New-Institutional Economics Approaches to Contracts: Substitutes or Complements?", in C. Ménard (ed.), *Institutions, Contracts, Organizations, Perspectives from New-Institutional Economics*, Edward Elgar Pub.

Brousseau, E. and J.M. Glachant (eds.) (2002), *The Economics of Contracts: Theory and Application*, Cambridge University Press.

Bryntse, K. and C. Greve (2002), "Competitive Contracting For Public Services: A Comparison of Policies and Implementation in Denmark and Sweden", mimeo, 21.

Caillaud, B., R. Guesnerie, P. Rey, and J. Tirole (1988), "Government Intervention in Production and Incentives Theory: A Review of Recent Contribution", *RAND Journal of Economics*, Vol./No. 19-1, Spring 1988, pp. 1-26.

California Constitution Revision Commission [CCRC] (1996), "Final Report and Recommendations to the Governor and The Legislature," pg. 2.

Coase, R.H. (1937), "The Nature of the Firm", *Economica N.S.*, Vol. 4, pp. 386-405, reprinted in O.E. Williamson and S. Winter (eds.) (1991), *The Nature of the Firm: Origins, Evolution, Development*, Oxford University Press, New York, pp. 18-33.

Comanor, W.S. and H.E. Frech III (1985), "The Competitive Effect of Verticals Agreements?", *American Economic Review*, June.

Crémer, J. (1995), "Arm's Length Relationship", *Quarterly Journal of Economics*, Vol. 110, pp. 275-296.

Donahue, J.D. (1997), "Tiebout? Or Not Tiebout? The Market Metaphor and America's Assignment Debate", *Journal of Economic Perspectives*, Vol. 11(4), pp. 73-81.

Engel, C. (1995), "Legal Experiences with Competition among Institutions", in Lüder Gerken (ed.), *Competition among Institutions*, Hayek Symposium 1994, London 1995, pp. 89-11.

Ferris, J. and E.E. Graddy (1996), "Institutional Economics and Government Contracting: Lessons for the New Public Management", paper prepared for the conference on "The New Public Management in International Perspective", Institute of Public Finance and Fiscal Law, 11-13 July 2006, St. Gallen, Switzerland.

Freixas, X., R. Guesnerie, and J. Tirole (1985), "Planning Under Incomplete Information and the Ratchet Effect", *Review of Economic Studies*, Vol. 52, pp. 173-192.

Fudenberg, D.,D. Kreps, and E. Maskin (1990), "Repeated Games with Long-run and Short-run Players,"*Review of Economic Studies*, Vol. 57(4), pages 555-73.

Green, J., and J.-J. Laffont (1977), "Characterization of Satisfactory Mechanisms for the Revelation of Preferences for Public Goods", *Econometrica*, Vol. 45, pp. 427-438.

Grossman, S.J. and O.D. Hart (1986), "The Costs And Benefits Of Ownership: A Theory of Vertical Integration", *Journal of Political Economy*, Vol. 94(4), pp. 691-719.

Hart, O.D. and B. Holmstrom (1987), "The Theory of Contracts", in Bewley (ed.), *Advance in Economic Theory*, Cambridge University Press, Cambridge, pp. 71-155.

Hart, O. and J. Moore (1988), "Incomplete Contracts and Renegotiation", *Econometrica*, Vol. 56, pp. 755-786.

Hart, O. and J. Moore (1999), "Foundations of Incomplete Contracts", *Review of Economic Studies*, Vol. 66(1), pp. 115-138.

Hart, O.D. and B. Holmström (1987), "The Theory of Contracts", in T.R. Bewley (ed.), *Advances in Economic Theory*, Fifth World Congress, Cambridge University Press, Cambridge, pp. 369-398.

Hirschman, A.O. (1970), *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*, Harvard University Press, Cambridge, Mass.

Inman, R.P. and D.L. Rubinfeld (1996), "Designing Tax Policy in Federalist Economies", *Journal of Public Economics*, Vol. 60(3), pp. 307-334.

Inman, R.P. and D.L. Rubinfeld (1997a), "Rethinking Federalism", *Journal of Economic Perspectives*, Vol. 11(4), pp. 43-64.

Inman, R.P. and D.L. Rubinfeld (1997b), "The Political Economy of Federalism", in Dennis C. Mueller (ed.), *Perspectives on Public Choice*, Cambridge University Press, Cambridge, pp. 73-105.

Josselin, J-M. and Alain Marciano (2003), "Federalism and Subsidiarity in National and International Contexts", in Juergen Backhaus and Richard E. Wagner (eds.), *Handbook of Public Finance*, Kluwer Academic Publisher, Dordrecht, pp. 477-520.

Josselin, J-M. and A. Marciano (1995), "Constitutionalism and Common Knowledge: Assessment and Application to a Future European Constitution", *Public Choice*, Vol. 85(1-2), pp. 173-188.

Josselin, J-M. and A. Marciano (1997), "The Paradox of Leviathan: How to Develop and Contain the Future European State", *European Journal of Law and Economics*, Vol. 4(1), pp. 5-21.

Josselin, J-M. and A. Marciano (2004), "Federalism and Conflicts over Principalship: Some Insights into the American Constitutional History", *Constitutional Political Economy*, Vol. 15(3), September, pp. 281-304.

Josselin, J-M. and A. Marciano (2005), "Administrative Law and Economics", in J.B. Cheltenham (ed.) (1999), *The Elgar Companion to Law and Economics*, Elgar, revised version, first edition.

Josselin, J-M. and A. Marciano (2006, forthcoming), "Economic Analysis of Administrative Law (agencies)", in David S. Clack (ed.), *The Sage Encyclopedia of Law and Society: American and Global Perspectives*, Sage, New York.

Joumard, I. (2005), "Getting the Most out of Public Sector Decentralisation in Mexico", OECD, Economic Department Working Paper No. 453.

Konisky, D.M. (2005), "Regulatory Competition and Environmental Enforcement: Evidence from the US States", mimeo, paper presented at the annual meeting of the Midwest Political Science Association, Chicago.

Kreps, D. (1990), *Game Theory and Economic Modelling*, Oxford University Press, Oxford.

Laffont, J.J. and J. Tirole (1993), *A Theory of Incentives in Procurement and Regulation*, MIT Press, Cambridge, Mass.

MacNeil, I.R. (1974), "The Many Futures of Contracts", *Southern California Law Review*, Vol. 47(688), pp. 691-816.

North, D.C. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge, Mass., p. 152.

Oates, W.E. and R.M. Schwab (1988), "Economic Competition Among Jurisdictions: Efficiency-Enhancing or Distortion-Inducing?", *Journal of Public Economics*, Vol. 35, No. 3, April, pp. 333-354.

Oates, W. E. (1999), "An Essay on Fiscal Federalism", *Journal of Economic Literature*, Vol. 37, No. 3, September, pp. 1120-1149.

Oates, W. E. (2005), "Toward a Second-Generation Theory of Fiscal Federalism,"*International Tax and Public Finance* 12, 349-373.

OECD (1989), *Economies En Transition: L'Ajustement Structurel dans les Pays de l'OCDE*, OECD Publications, Paris.

Perrot, A. (1992), "Asymétrie d'Information et Contrats", *Annales des Mines, Gérer et Comprendre*, mars.

Posner, R.A. (1986), *Economic Analysis of Law*, 3rd edition, Little Brown, Boston, p. 666.

Rocaboy, Y. and G. Gilbert (2004), "The Central Government grant allocation problem in the presence of misrepresentation and cheating", *Economics of Governance*, 5, 137-147.

Rey, P. and J. Stiglitz (1988), "Vertical Restraints and Producers' Competition", *European Economic Review*, Vol./No. 32, pp. 561-568.

Salmon, P. (1987b), "Decentralization as an Incentive Scheme", *Oxford Review of Economic Policy*, Vol. 3, No. 2, Summer, pp. 24-43.

Salmon, P. (2000), "Decentralization and Supranationality: the Case of the European Union", in Ehtisham Ahmad and Vito Tanzi (eds.), *Managing Fiscal Decentralization*, Routledge, London and New York, pp. 99-121.

Seabright, P. (1996), "Accountability and Decentralization in Government: an Incomplete Contracts Model", *European Economic Review*, Vol. 40, pp. 61-89.

Simon, H.A. (1976), "From Substantive to Procedural Rationality", in S. Latsis (ed.), *Methods and Appraisals in Economics*, Cambridge University Press, pp. 129-148.

Stiglitz, J.E. (1977), "Monopoly Nonlinear Pricing and Imperfect Information: the Insurance Market", *Review of Economic Studies*, Vol. 44, pp. 407-430.

Tirole, J. (1999), Incomplete Contracts: Where Do We Stand?, *Econometrica*, Vol. 67(4), pp. 741-782.

Trachtman, J.T. (1993), "International Regulatory Competition, Externalization, and Jurisdiction", *Harvard International Law Journal*, Vol. 34.

United Kingdom, Office of the Deputy Prime Minister (2005), "Councillors and the New Council Constitutions," pg. 7.

Vanberg, V. and W. Kerber (1994), "Institutional Competition among Jurisdiction. An Evolutionary Approach", *Constitutional Political Economy*, Vol. 5(2), pp. 193-219.

Vickers, J. (1985), "Strategic Competition among the Few: Some Recent Developments in the Economics of Industry,"*Oxford Review of Economic Policy*, Vol. 1, October.

Weitzman, M. (1980), "The Ratchet Principle and Performance Incentives", *Bell Journal of Economics*, Vol. 11, pp. 302-308.

Williamson, O.E. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*, The Free Press, New York.

Williamson, O.E. (1985), *The Economic Institutions of Capitalism*, The Free Press, New York.

Williamson, O.E. (1991), "Comparative Economic Organization: the Analysis of Discrete Structural Alternatives", *Administrative Science Quarterly*, Vol. 36, June, pp. 269-296.

Williamson, O.E. (1996), *The Mechanisms of Governance*, Oxford University Press, Oxford.

Table of Contents

Boxes

Tables

Figures