The dark and blue sides of renegotiation: An application to transport concession contracts

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Abstract

In the contract economics literature, renegotiations are mainly seen as pernicious: they reduce incentives; they are costly in terms of money and time; and they are often supposed to go hand in hand with corruption. In a word, they reflect the inefficiencies of contracts.

Before addressing another view, that is to say, the potential blue sides of renegotiation, we first review and detail more precisely how renegotiations are demonstrated to be so negative. Then we study three cases of contracts that have been renegotiated, and we show that those renegotiations were saving: cooperation rather than opportunism enter in the game, and finally the three parties (the private operator, the public authority in a public finance vision, and the people, in the welfare vision) are winners.

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1. Relationship to the literature

In the contract economics literature, renegotiations are mainly seen as pernicious: they reduce incentives; they are costly in terms of money and time; and they are often supposed to go hand in hand with corruption. In a word, they reflect the inefficiencies of contracts.
Before addressing another view, that is to say, the potential blue sides of renegotiation, let's first review and understand more precisely how renegotiations are demonstrated to be so negative.

The agency theory mainly relies on information asymmetries between economic agents [Laffont, Martimort, 2002], namely adverse selection [Rotshild, Stiglitz, 1976] and moral hazard [Akerlof, 1970]. Thus, the principal-agent relation questions the nature of optimal contracts, which are supposed to give incentives to the agent to reveal his "type" and to be efficient. The most frequent solutions given by this theory are compensations schemes from the principal to the agent: a lump sum compensation Vs a performance-linked payment. The agent who discovers that he is inefficient will probably try to renegotiate. But the agency theory assumes that the principal commits not to renegotiate. It supposes, in the case of a long term contract between the state and a private operator (Public Private Partnerships are a good illustration of what a principal-agent relation can look like), that the State respects his commitments or that the regulator is totally independent or very strong institutions, etc. Theoretically, this leads to propositions in which contracts are complete [Crocker, Reynolds, 1993]. Previous empirical researches show a link between contract completeness and lower probability to renegotiate [Bajari, Tadelis, 2001].
However, in reality, the authority (=the principal, in the agency theory) has lower commitment capacities than expected by most of the models [Gagnepain, Ivaldi, Martimort, 2008] to avoid renegotiations. Following Guasch, 2004, 30% of concession contracts are renegotiated, and 54.7% of transportation contracts are so.
Some recent developments of the agency theory intent to take the role of institutions and the probability of renegotiation into account [Laffont, 2005; Guasch, Laffont, Straub, 2006; Guasch, Straub, 2006], that is to say, as an explicit part of the initial contract preparation [Estache, Quesada, 2001]. In Guasch-Laffont-Straub's model, the regulator knows that if the firm is inefficient ex post, she (the firm) will renegotiate with a probability $1- \Pi(x)$. But this probability is also the reflect of the quality of institutions and their capacity of enforcing

commitments. Renegotiation would be peculiar to countries with weak institutions. Many empirical studies were lead in Latin America [the previously mentioned in particular], and they enhance the role of corruption to explain renegotiation and the discontent of population [Straub, Martimort, 2006]. In most of these models, renegotiations are demonstrated to lead to inefficiencies, via the introduction of a coefficient, λ, affecting the total surplus. And λ's value is between 0 and 1, that is to say that renegotiation always decreases the surplus in those models.

In this respect, transaction cost economics is not far from the agency theory: renegotiating induces transaction costs [Williamson, 1985]: research costs to find an agreement, ink costs to write the amendment, time costs that are wasted, and so on. In a nutshell, parties would renegotiate to share the surplus differently from the initial agreement, but the total surplus would decrease because of transaction costs, that might be very high [North, Wallis 1986].

Thus, renegotiation has always been studied through the path of opportunism ([Jolls, 1997] particularly develops the case of moral hazard), sometimes coming from the private party, sometimes from the public one. In the latter case, political decisions (e.g. elective goals, [Engel, Fischer, Galetovic, 2003; Engel, Fischer, Galetovic, 2006]; or changing the rules of the game [Levy, Spiller, 1994; Spiller, 1996]) are implied, and not the need for new adaptations of the contract. Spiller, 2008, also evocates third party opportunism as the fundamental risk of public contracts: interest groups also have incentives to take advantage of their information, and they have means of pressure for that aim. Anyhow, Guasch, 2004, describes the most common outcomes of renegotiation (the sample relies on Latin-America examples): they induce delays on investment obligation targets (69%), tariff increases (62%), increases in the number of cost components with an automatic pass-through to tariff increases (59%), reductions in investment obligations (62%), changes in the asset-capital base favourable to the operator (46%), and so forth. The balance sheet is catastrophic, and users would be the first victims [Estache 2006]. One should note that the feedback in developed countries is also mitigated [Engel, 2005].

But Guasch, 2004, himself, writes: "*Renegotiation should occur only when justified by the initial contract's built-in contingencies or by major unexpected events. The objective is to improve the design of concessions to secure long-term sector efficiency, fostering compliance with the terms agreed to by both the governments and the operator*". And here is the intuition

behind our paper: how could one expect a long-term contract (average of 30 years when dealing with a concession contract) to be efficient if it is not regularly adapted to the moving realities? During such durations, it is really conceivable that the legislation changes, or the technology of vehicles changes, requiring adaptations of the surfaces of the roads for instance, or the financing constraint of the State evolutes, or the security norms are modified, and so forth. All these kinds of evolutions necessitate adaptations that are materialised by amendments of the contracts. Does that mean opportunism? We take the party of saying "no, not necessarily". Hence, renegotiation could be seen through the path of cooperation, rather than opportunism. Moreover, in democratic and developed countries, it seems foolish to believe that a private operator would sign an amendment to a contract that he does not want to sign, because he would loose at this game. And similarly, there is no reason for a public authority to agree with an amendment, under the threat of an operator. Both have to be winners, unless there is no possible signature. More formally, though renegotiating is costly, it is plausible that it enables to increase the total surplus.

Some recent developments of the incomplete contracts theory [Grossman, Hart 1986] underlie this: Contracts are incomplete because agents are not able to account for all possible contingencies. Even if they were, it would be too costly. Furthermore, some contingencies cannot be verified by third parties: the level of effort of the operator is a good example. So, there is no need to loose time writing a contract specifying the level of effort, because it would not be a verifiable clause [Grossman, Hart 1986; Hart, Moore, 1988; Hart, 1995]. Thus, this theory considers the non-anticipated states of nature and the need to adapt them to the contract as a contractual constraint: as contracts are incomplete, the levels of specific investments required for the deal, cannot be specified *ex ante*, so *ex post* renegotiations appear necessary.

This leads to the question of the trade-off between rigidity and flexibility of contract designs: contracts designed in strong institutional environments, with low uncertainty, and good relations between parties should be rather flexible, so that adaptations of the contract are not problematic [Athias, Saussier, 2006]. The concepts of cooperation and relational contracts [Beuve, 2008; Baker, Gibbons, Murphy, 2002] are thus emerging little by little in the economics literature. Besides, the direction of the causality between contract incompleteness and informal relationships is currently discussed [Tirole, 2008; Beuve, Desrieux, 2008]. In our sense, it is because contracts can be relational, that relationships can be informal, i.e., not

requiring rigid and complete contracts. This theory supports our view: parties are able to cooperate, to work hand in hand.

Let us now precise this notion. Cooperation does not mean that parties are selfless, voluntary or totally altruist, but rather that they act with a global interest objective. This gives an echo to the « prisoner's dilemma », framed by Merrill Flood and Melvin Dresher [1952; 1961]; in which the strategically dominant choice of each player (which is apparently rational), creates in fact sub-optimal gains for them two.

		Public authority : B	
		cooperates	acts opportunistically
private operator A	Cooperates	(1;1)	(-3;2)
	acts opportunistically	(2;-3)	(-1;-1)

On the contrary, cooperation signifies that, if they do not try to cheat, if they share the information, parties may be able to win together more during longer terms. The French expression seems to be appropriate here: you can lie to one thousand persons once, but you cannot lie one thousand times to one person! We should not forget that concession contracts are long term ones, and they can be very profitable, so if one party is disloyal once, though it can bring money, one can be sure that this party can not do the same thing twice, because the other party will be more suspicious, more risk-averse and so prevent herself from any other opportunism. What we must have in mind here, is that we are in a potential repeated game context.

We follow with a short remark on the connotation of the word "renegotiation". A very quick poll showed that this word had a pejorative connotation, as if it meant "to go back over commitment". With the choice of this word (which, as we will see, can recover several realities), it is not surprising that economists are investigating the field of opportunism. It is as if these researchers were forgetting all the possible blue sides of renegotiations: like adaptations, or following an innovation, etc..

Ideally, economists should change the term « renegotiation » because it is not adapted to all kinds of contracts modification. Whereas the word "modification" could both take into account the opportunistic and the cooperative changes.

Anyhow, the stakes of the question of "renegotiation" (we will keep on using this term, not to loose our lectors, and because the revolution has not started yet!) are very important. The European commission is really concerned about it and mainly on the motorways and roads

sectors. Some kinds of renegotiation (like adding a new highway section in the contract) are now forbidden for reasons of competition. But this measure spreads out a vision of renegotiation as an act of lack of transparency.

In a nutshell, concerning renegotiations, we are now facing two economic visions. In the first one, concession contracts are deplored to be too rigid but this is a necessary trouble to protect competition. And this rigidity makes contracts maladapted and renegotiation too difficult. In the other vision, contracts are too flexible, which leaves the door open to opportunistic renegotiations, and make contracts inefficient (for more details, see the review of literature below).

In both of them, renegotiations are costly and reduce the surplus associated with the contract, but none of them really measures the difficulties, or the costs of renegotiation, nor do they give evidences about the fact that it reduces the surplus. To our knowledge, nobody has investigated the potential generation of information or innovation arising from renegotiation in public-private partnership contracts.

Maybe we are on the wrong track, but at least we have to verify it. This is what we intend to do here. This very first paper is an empirical one. Here, we make three case studies: for each one we describe the institutional context in which the contract and the amendment were signed. Then we detail a bit the content of the change. Finally, we show that renegotiating has been a win-win game. And maybe a win-win-win game, because we introduce a third person: the private operator, the public authority and the People. This enables to erase the systematic use of the theory of opportunism, and shows that cooperation is possible. It leaves us enough space to build, in a second paper, a theoretical model based on relational contracting. We will also make some propositions that will be tested thanks to an original database made of more than a hundred observations.

2. Case studies

2.1. Cambodia - airport

The case we are now going to study, concerns a contract in the Kingdom of Cambodia. It appeared to us important to study the case of a contract signed in a developing country, just like Guasch et al. (for references, read the review of literature bellow) do for Latin America:

we show it is possible that renegotiation does not necessarily mean opportunism from one party, even in a poor and devastated country. Further, without a renegotiation, the contract would have been a mess, if not a cancellation.

We thought it would be more relevant to first describe briefly the political, historical and institutional environments of Cambodia, in order to understand better then the context and the reasons of renegotiation.

The Kingdom of Cambodia hardly recovers from the problems of Cold War, of civil war initiated while the Khmer Rouges were at the power, with a pick in 1975 and the problems issued from Vietnam invasion from 1978 to the end of 1989. The result is that the Cambodian economy still widely relies on international financial help: Word Bank help, Asian Bank of Development help and help from several bilateral relations (one third of the budget was made of foreign help in 2001). It is classified in the group of weak revenues by the World Bank, with a population of a bit more than 14.000.000 inhabitants, whom 51% are less than 18 years old. Corruption is omnipresent (the Corruption Perception Index of Transparency International ranks Cambodia 162nd out of 179), and the 2007 Doing Business report ranked Cambodia as the 145th country (in a set of 176 countries), meaning a weak judicial system. The educational system is also very poor. The economy of the country is based on the culture of rice, on fishing and on cattle raising. During the wars, a very important fraction of the population was killed or decided to leave the country, which signifies that the human and infrastructural resources in the early 90's had nearly totally deserted Cambodia. For instance, while Phnom-Penh and Siem Reap are 430 kilometres distant one from another, one needed more than 18 hours of trip to join up those two cities in 1993.

In this context, it is undeniable that Cambodia needed to concentrate its forces on development and growth. Transports were possibly a good leverage to enhance that change.

This is what the Cambodian government thought in the early 90's, when they decided to organize a competitive bidding to allocate a concession for the only international airport of the country, in Phnom-Penh to a private operator. Indeed, the public funds were scarce and the airport in a very bad state, not respecting the norms of the International Civil Aviation Organisation (ICAO). Calling for the skills of a private firm, with a part of private funds was then a relevant consensus; but also a very risky challenge for the potential operator: in fact, the passenger traffic was very low and probably decreasing for years, because of the Khmer Rouge destructions and the Vietnamian invasion. In spite of the touristic attraction for Angkor's temples, only 200.000 passengers flied to Phnom-Penh in 1995. Before 1995, no data exists anymore. They have probably been destroyed or burnt. Anyway, the airport, which

had been built in 1955 during the French colony period, was in a very bad state, because the runway, of 2500 metres long, had become a battlefield in the 80's. Only very few Russian planes kept on landing and taking off. It was not adapted at all to international prevailing norms, so not only did the runway and the terminal have to be consolidated, extended and strengthen; but also another one had to be designed, built and operated, assuming the very high traffic risk…

In 1995, when the call for tenders was launched, five bidders answered the bid. One of them was French and had answered the call for tenders encouraged by the French government, which had the willingness to tighten its links to help Cambodia (a former French colony) to get back on its feet. For that aim, the French government had promised to make a donation of 16 million dollars to Cambodia. But, in spite of that, the Malaysian bidder won the bid. Unfortunately, after four months, negotiations between the Cambodian government and the Malaysian firm failed. Another call for tender was then organized. The French group concluded an agreement with another Malaysian firm and their bid was accepted. The contract was then signed. The concession duration was of 20 years.

Considering the uncertainty prevailing over this environment, the lowest hypothesis was hold for the traffic forecast. Let us remind that the internal rate of return is the discount rate which equalises the present value of equity and the present value of dividends. And those values are the assumptions' reflect on which the financial model of the concession is based.

Anyway, the existing facilities were rapidly consolidated so that the traffic started to grow in 1995 and 1996. The bank consortium was set up and ready for the financial closing, in the aim of building the new terminal, supposingly made of several modules, which cost 38 million USD each.

However, during the 1997 summer, two unpredictable events happened: the Asian economic and financial crisis started to spread over Cambodia with the depreciation of their currency; and a military insurrection exploded in the capital of the country. Those two elements had deplorable consequences: capital outflow in the whole region, collapse of the traffic in the airport (from 350.000 to 0). The turnover of the concessionaire went from 4 million USD before the crisis, to – 40 million USD after it. Inevitably, the banks started one after another to cancel their loans. The concession was bankrupting. And the airport was more and more damaged, day after day, while any valuable good was pillaged or used as a rocket.

As written in the contract, in case of force majeure, "*either party may terminate the concession agreement*". In that case, "*the parties shall consult each other […] to reach a fair and equitable solution*". This is what would have happened (the concession company could have used its COFACE and have gone away from this very instable and uncertain country), if the French delegate, responsible for this project in Cambodia had not refused this solution. For a while, the Cambodian government also encouraged the concessionaire to resign because uncertainty was much too prevalent (only losses, no financing, no traffic, etc). But after long discussions, it was decided that another solution had to be found. The "spirit of the contract" (a moral commitment, to both enhance development and succeed in the realisation of this concession) prevailed over the "letter of the contract" (some written clauses enable to leave the concession in such emergency cases) [Mc Neil, 1974]. And this is how the first amendment of the first worldwide airport concession contract was born: July 6th 1997, 16 pages and several months of negotiation, but the concession still relies on its feet!

The content of the addendum is rather easy to analyse: it is a kind of compromise between a compensation for the concessionaire's losses, and the willingness for the Cambodian state not to become more impoverished. Basically, it consists in both an extension of the concession period: 5 more years, i.e. 25 years; and also in the creation of compensation account, to make up for the 1.679.328 USD sustained by the contractor because of the 1997 events. This account should be credited with the insurance compensation received and with a portion of the revenue sharing that the Cambodian government was entitled to.
In that perspective, the financial model of the concession is modified, in order to fit with the adjusted traffic forecasts (lower estimates than in the initial contract until 2001). Besides, a monthly report is asked to the concessionaire to follow the status of achievement of actions defined in the contract and the addendum.

Fundamentally, there is no need to calculate a sophisticated but always imperfect cost-benefit analysis. Let us just be good sense and a little bit intuitive:

The first step might be to say that this renegotiation was a win-win game:
-The Cambodian government now has a running airport, and the traffic has increased after the end of the Asian crisis, so that the revenue sharing rapidly went back to normal. This success might have helped in the re-election of the government (but no one can really assert it because of fraud presumption in the electoral process).

-The concessionaire could rapidly generate again positive profits, and now benefits from an important reputational gain. Not only have they been able to cope with the first airport concession worldwide (technical feat), but they also went over the institutional and political challenge, in a country with very high uncertainty.

-Finally, one should not forget a third party (though some economists include it with the State, the public party), i.e. the Cambodian people, who is also winner at the stake of this renegotiation. In such a devastated country, having an operational airport means growth. It is a direct growth first, because the contract stipulated that "*as far as possible, local staff and local sub-contractors had to be employed*". Indirectly then, because an airport in good state enables to host more tourists in the city of Phnom-Penh, which means that the economic activity is going to rise. And of course, tourism generates revenues for local inhabitants, new possibilities of consumption, of development, and so forth.

The first amendment of Phnom-Penh airport has been a triple-win game. Cooperation for development (both human development and business development) has prevailed over opportunism.

The second step, after assuming that cooperation is possible, could be, in this case study, to say that renegotiating was absolutely necessary. If this amendment had not been signed, both the public and the private parties would have been obliged to interrupt or cancel the contract. Indeed, considering the huge financial losses and the pull back of banks support, the airport could not keep on running. For the operator there would have been two possible outcomes: use the COFACE or bankrupt. For the government, this concession would have been a dead-weight loss: organizing two calls for tenders, and still having an unusable airport, would just have represented time and financial losses. All the sunk costs and cognitive costs for the acquisition of knowledge to concede an airport, and the specific assets developed to grow accustomed to the Cambodian institutional environment would have been no more than lost transaction costs. Finally, contrary to what previous literature sometimes says, had there been no renegotiation, the local population would have probably been the most affected looser.

2.2. France - motorway

Let us now skip to the second case study, dealing with a French motorway concession contract. The French government originally allocated this contract in 1970, to a private operator in charge of building, operating and maintaining the infrastructure, within the

framework of a public service. Today, it is an approximately 1100 kilometres toll highway, focused on the north west of France. The concession will end around 2030.
This activity is definitely less risky than the previous case study. However, one should not under-estimate the several following risks: the demand and sales risks (for example, the skyrocket of oil prices had an echo on the frequenting of motorways); the construction risk (which may lead to delays or over-costs); and the risk linked to exposure and debt.
In order to understand the interest of the amendment we are going to study, we shall first review the institutional context in which it happened: a European directive putting an end to cross-financing (called "adossement" in French) and the French law of decentralization.

The French regime of "adossement" was a kind of balancing out which enabled to develop the French motorway network. It consisted in first conceding the realisation and operation of the most urgent motorway sections, where there was the highest demand. Then, once the investments were paid off, the operator could take new sections in charge. Thanks to an increase of the concession duration on the most profitable section, the operator could finance the other sections. This is how, between 1970 and 1990, the French motorway network grew up from 1500 km to 7000km. But this system also led to abuses: some interviews with public decision makers revealed that the private operators frequently have a higher willingness to develop their activity (having new building sites) than to maximise their short term profit through price clauses of the contracts. So, we can observe that a few immoderate sections of highway have been built. Though it was costless for the state, because it was financed with the tolls and the operator's loans, we could notice that investments were sometimes disproportioned, compared to real needs.
In the mid 90's then, the European Union decided to prohibit this cross-financing system: each new section now required a call for tenders, and had to find its own profitability. Nevertheless, the French Council of State, adopted in September 1999, the so-called "little pieces theory": it means that when the length of a section is marginal, in continuity with the existing network of a concession and does not have any functional autonomy, then it can be incorporated to the network of the concession.
Let us now turn to the second element of the institutional context. In the years 2000, the French government adopted a law for the decentralisation of competencies from the central administration to the regions (sub-entity of the state) and départements (which are a sub-entity of the region). This decentralisation was applied to the road sector in 2006: roughly, the central administration transferred 18 000 km of roads to the departments, which now benefit

from increased financial means to honour this responsibility. Only 10 000 km of national roads and non-conceded motorways remained under the competency of the central State.

The description of the institutional context enables to understand the framework of the amendment in question in this case study. Basically, before the 12th amendment in May 2007, the concessionaire had built and was exploiting two (among others) sections: one section from point A to point B, of 80 kilometres, and the other section, from point C to point D, of 105 kilometres. And point B to point C was a national motorway exploited by the state. Before, the roads decentralisation law in 2006, this choice seemed rational, since the state also exploited other roads in the region: there were some scale economies for the State to care for several roads. However, after those roads were transferred to another administrative grade, the road portion from B to C was the only one that remained under the state circumscription. Indeed, motorways must be state owned in France, so that regional property right transfer is not possible. But after 2006, it became irrelevant for the state to be present in the region for only one road portion of hardly 10 kilometres: keeping an office there and granting many vehicles in charge of this isolated portion had become too costly. This motorway portion was called, with a few others, an "orphan of decentralisation". So, there were two possible choices: allocating the exploitation and maintenance through an amendment to the operator already present in the region, as it was made possible by the "little pieces theory", or making a call for tenders.

The first possibility was chosen for several reasons: first, a technical point may be enhanced. Having a different operator between two sections operated by another operator raises the problem of continuity: it would create problems of interface and of legal responsibility. For instance, in case of snow, what if the machine to clear the snow of one operator is ahead of his section and encounters a problem? Those questions are possible to answer but they are very costly. Second, the financial point is underlined: if another operator had got the section in question, the state would have had to subsidize it: as it will be explained later, this 10 kilometres section does not have a financial autonomy and must not be tolled. Making a call for tenders equals to writing another contract. And this would mean that no cross financing is possible with other sections, so the state would have had to pay a kind of wage to the operator. Finally, there is a question of honesty: who, except the A-B/C-D operator, would have an interest in being present there for only 10 kilometres? Organizing a call for tenders would be a fictive competitive bidding. And also very costly, because there would have been no doubt that the A-B/C-D operator won the bid.

For all these reasons, the State chose to amend the initial contract of the private operator who already had the responsibility of sections A-B and C-D: the twelfth amendment attributed the portion B-C. But, when the portion was state-owned, it was a free portion: the users did not have to pay a toll. So for user acceptability reasons, this section had to remain toll free. The main issue raised during the negotiation was the question of compensation: indeed, the quality standards of the B-C portion were lower than in A-B and C-D (no radio, no patrols, and huge roadwork were required). So, in a logic of continuity between A and D, the private operator had to incur expenses: around 16 millions € of investments had to be spent to reach the standards and norms of the other section (which the State could not afford), to build a motorway service station, and so forth. Added to this, the grantor had to spend annual exploitation charges. Those costs were approved by an audit of roadwork and norm convergence by the public mission of motorway control. So, in order to support those costs, the concessionaire negotiated an increase of toll tariffs on their whole network: +0.31% increase. This negotiated rise was minim and supported by all the network users instead of imposing high tariff increase on only one section

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Finally, we set up an assessment of the renegotiation outcome for the different actors of the game:

- For the public authority, there is a gain in terms of public finance: they do not have to support exploitation costs anymore, and they save all the organisational costs that had skyrocketed for the only B-C section, after the decentralisation law.
- For the private operator, there is of course a financial gain, unless they would not have signed the amendment. This new section represents an increase of the business volume. Not only does the +0.31% rise cover the investments required for the new section, but it also enables to increase their outcome.
- Among the population, we can distinguish three categories: the users of the section still benefit from the public service but at a higher quality level. Taxpayers save a part of tax increase that would have been required for the roadwork if the section had remained exploited and maintained by the State. Finally, only users of the network support an increase, but the rise is so spread out and negligible, that it does not really

affect their purchase power. Moreover, one can say users of A-D benefit from a real continuity of service on the whole distance.

One can say first, that making network users instead of taxpayers pay the bill is more equitable [J. Rawls,]: it seems fair not to ask to all the citizens to make an effort of expenses for a motorway they are probably not going to use. And second, asking to the whole network users instead of B-C users only to subsidize the roadwork introduces a part of egalitarian. And this choice appears relevant, since the portion of users driving only from B to C is negligible, so the free rider phenomenon [M. Olson, 1965] is very limited. This second remark underlines a kind of network effect: all network users benefit from the positive externality of B-C roadwork.

- Finally, we can say a word about environment, though it cannot be considered as an actor strictly speaking: this amendment is positive in this point of view, because the roadwork was led with environmental concerns.

3. Public policy implications and concluding remarks

Those two case studies (there will be one more in a further version…) show how renegotiation can affect positively the global surplus of the contract. Talking with public and private decision makers revealed that it is nearly impossible to loose at that game. The trickiest step is in fact the negotiation of the amendment: in function of the bargaining power, one party may recover more surplus than the other, but none of those that we have interviewed have ever encountered a renegotiation with a loser: though transaction costs associated with the process may be high (because auditors are required, or lawyers, or because negotiating takes time, and so forth), first it would be foolish to believe that those transaction cost are superior to the gains of renegotiation, and second, we learn from negotiation theory that final decisions are always more or less at the barycentre of the parties claim and expectations.

This study does not tell us that what has previously been written in other articles is wrong. It says that they are not always true. The huge work that remains to be done is to search when a renegotiation is opportunistic and when it is cooperative.

But all the actors that we interviewed for this paper have the same kind of speech, though they do not know each other, and they do not come from the same institutions (some come from private firms, some from several public entities). They all agree to say that long term contracts naturally need to be adapted through time, because the environment changes. They do not deny that information asymmetries exist between the negotiators, but it seems that the willingness to conclude an agreement animates both parties, so that they always find an acceptable agreement. And, as the public party is run by public vote, electors are taken into account in the renegotiation tables. If they are not, the French Council of State (for the French case) is here to remind it to the parties. Transparency has become one of the major progresses those latest years when dealing with public-private partnership. The French "SAPIN" and "LOTI" laws are good examples and they converge with the European law: they promote competition and transparency in the procurement of public contracts.

On that question of competition, our article enables to feed the debate on "adossement", i.e. on cross financing of motorway sections. As explained in the French motorway case study, cross financing has been forbidden little by little since the mid-90's by the European commission, in order to avoid wastes and useless investments. But it also contributed to widespread the vision of renegotiation as the worst devil ever! Prohibiting cross-financing sounded like the end of corruption! We do not deny that some dark things may have happened in the past. And the abuses we talked about in the previous section are part of it.

However, it seems that organising competitive biddings for each single little portion is also crazy and leads to incongruity. Our second case study did not fall in this excess thanks to the so called "little pieces theory". But this kind of practice is more and more disputed. The European Commission tends to make it harder and rarer. We would not be surprised if it was completely forbidden soon. To our opinion, it would be an error, and would sound like going from an absurdity to another one.

Typically, in our second case study, let us imagine for a while that a call for tenders would have been organised for the 10 kilometres section. Three possible scenarios: 1/ the first one, which is the most plausible: only one bidder answers the bid, because it is the only one that has an interest in having this section. This bidder is of course the one that is present for A-B and C-D. In this case, we conclude that the state looses sunk costs in organizing a call for tenders. Moreover, as a call for tenders signifies that a new contract must be signed, then, as the B-C section has no financial autonomy, the State must subsidize the contract. 2/ the second possibility is that there are several honest bidders who answer the call for tenders. Only the bidder who is already present in the region can make scale economies (human and

physic capitals are already in place), so he will make the lowest bid and win it. Here, there are sunk costs for the other bidders (note that answering a competitive bidding costs between one and two million € for an operator), and the State must, once again, subsidize the project.

3/ finally, imagine that several bidders answer, among which, one or more are dishonest. One of those will win the bid thanks to lower announced costs. But this practice is opportunistic and leads to opportunistic renegotiation. The strategy to promise low costs only serves to win the call for tenders and get the contract. But then, once he has the contract, the operator may renegotiate to have more subsidies for instance. In this situation favouring bad behaviour, the State and citizens are losers: their operator is inefficient and the state has incurred costly processes of call for tenders for that result.

Our example is a bit rough, but it shows what may be the immoderations of a total ban of cross financing. Recently, it seems that there is a kind of confusion between transparency and competition, which are, in reality, totally distinct.

Moreover, the success of the French “Contrats de Plan” (CdP) is another evidence underlining that it is wrong to suspect all actors to be malevolent. Those CdP are negotiated for five years, and they set up the main rules and principles of the contract. They provide a great visibility to the parties (on investments to make, on tariff increase or stabilisation, on exploitation commitments, etc.) and represent a good regulation tool for the public authority. Those CdP are not compulsory, but the reality shows that they are frequently asked by operators. This willingness to draw mutual commitments may show that parties are cooperative-prone.

We finally go back to more theoretical considerations. Dealing with the agency theory, our study enhances that renegotiation and incentives do not exclude each other. Unless there is a force majeure, renegotiation generally does not go back over the very core of the initial contract. It rather deals with news investments or adaptations following an innovation or unanticipated information. For instance, in 1970 when the French motorway contract was signed, who could have expected the road decentralisation law? On the contrary, we believe that the vision of renegotiation giving new incentives is sustainable. This might be a way to explore in future research.

In the agency theory and the transaction cost theory, we agree to say that renegotiating has a cost, but the surplus generated by the amendment must not be forgotten! Besides, the interviews we led for this article, enabled to learn that it is unusual to redefine the share of risks during renegotiations. In that sense, the vision of renegotiation as a different sharing of

the cake (as suggested by the transaction cost theory) is incongruous: renegotiation happens when there is a new piece of cake to share (due to new information, or innovation)!

To conclude, this work opens a huge window on future research. We may start by formalizing renegotiation in a more appropriate theoretical framework. The theory of relational contract may be a relevant track. It enables to combine the advantages of a formal written contract and of an informal relationship. Thanks to the existence of the formal contract, long term and cooperative relationships can be developed. Hence, the informal relationship enriches the formal contract. We totally disagree with the vision of impossible relational contracting in public private partnership, due to the existence of renegotiation. We say the reverse: renegotiation is an occasion to behave cooperatively and to build informal relationship which will settle the partnership in the duration.

We may also address the question of when renegotiation is cooperative and when it is opportunistic. In that aim, we are currently building a database, and a questionnaire will be addressed to a set of public and private decision makers. Our paper has already enabled to distinguish two possible determinants of cooperation: un-forecasted (and un-forcastable) information (new law in our case) and force majeure. In that latter case, we did not show that renegotiating created surplus, but we underlined that under some circumstances, it enables the parties not to go dead-end. Had not it been renegotiated, the contract would have been cancelled. We hope that future research will emphasize other determinants.

4. References

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