9. USEFULNESS OF TCE FRAMEWORK AND OTHER NIE THEORIES

This chapter analyses the research question from the perspective of the fourth specific objective, which states:

To draw conclusions on the usefulness of the Transaction Cost Economics framework in explaining the relationships between the autonomous hospitals and their purchasers, i.e., the Secretariat of Health of Bogota and ARSs.

Transaction Cost Economics, as shown in chapter 2, is intended to explain the choice of alternative vertical arrangements between links in the chain of production. It predicts that the relationships between any two links in the vertical chain are shaped by transaction costs, so that transactions, which differ in their costs, are aligned with governance structures, which differ in their attributes, to reduce transaction costs. In addition, the sources of transaction costs, according to the theory, are the impossibility to reach a complete contract *ex-ante*, inefficiencies in *ex-ante* investments and the risk of *ex-post* inefficient behaviour regarding haggling, pricing and production (Joskow, 2005). These two main factors are also determined by opportunism and bounded rationality as behavioural assumptions.

It has also been argued in chapter 2 that the NPM approach of shifting from direct provision to contracting in (PPS) and out is no different from the TCE rationale for economic organisation of the public sector.

The findings shown so far, suggest that these theoretical predictions:

1) applied fairly well to the relationships between ESEs and ARSs for level II and III services, but:
2) did not apply well to the relationships between:
    a) ESEs and the SOH, and
    b) between ESEs and ARSs for level I services.

In the first case, it was found that the parties searched for win-win situations and were interested in building trust, which were the basis for long-term relationships; this certainly allowed transaction costs to be reduced. In the case of 2) a), transaction costs

were found but these did not shape the governance structure as expected from TCE. In fact, in some cases less cooperation was found to be a source of transaction costs. In the case of 2) b), it was found that transaction costs were large enough to justify the search for a transaction-cost- economising governance structure, as observed for higher complexity services, but this was not the case because the parties were locked-in by external regulations which decreased incentives at the ESE to reduce transaction costs.

In this chapter, the findings will be analysed from the perspective of other New Institutional Economics (NIE) theories, i.e., agency theory, property rights, and public choice. The propositions to be tested in this chapter are:

- **Proposition 1**: Regarding agency theory, the lack of a clear and uni-dimensional objective function adequately explains ESE managers' response to autonomy, as agents to the SOH and ARSs.
- **Proposition 2**: Regarding property rights theory, the lack of an adequate allocation of property rights explains why some ESE managers do not invest time and effort in reducing transaction costs in their relationships with payers.
- **Proposition 3**: Regarding public choice theory, politicians' and managers' interests other than improve hospital performance explain the lack of a role of transaction costs in shaping the relationships between ESEs and purchasers.

Conclusions about the applicability of TCE to explain the findings will be drawn. And finally, the best explanation of the findings is proposed by complementing the findings of the previous chapters with the conclusions drawn from the other theories.

Findings related to other NIE theories

9.1.Agency theory

Regarding agency theory, the effects of incentives and monitoring were clearly pointed out by managers. The ESE manager, as the agent to the SOH, responds to the high-powered incentives inherent in the payment mechanism. Fee-for-service payments are known to create incentives to induce demand, whereas prospective payments create incentives to skimp on care. These incentives were clearly acknowledged by ESE

managers. For example, the manager of IIC, commenting on the incentives inherent in FGPP towards reducing the complexity of patients, pointed out that:

"…I concentrate my activities in [those] that reap short-term benefits. Thus, my outreach group goes there to look for the people, so that they do not show up at the ESE, or they do not present the diarrheal episode, or pneumonia. I control my demand. (…) I don´t know if this is unethical, but I was put here to manage the ESE and I have to make it improve. (…) if they pay me for what I do [i.e., a fee-for-service payment] I do a lot, but if they pay me for keeping the population healthy, I search the way to keep them healthy within the timeframe that I have in the contract."

The manager of IIIC also openly acknowledged his responses to these high-powered incentives, particularly regarding fee-for-service:

"…when we were paid on a fee-for-service, we billed everything. If you coughed at the radiology service, you were taken for a chest X-ray. We (the ESEs) play by the rules put by the purchaser."

In an opposite sense, the manager of IF pointed at a contradiction between the objective function set by the SOH and the monitoring mechanisms that do not allow for the optimisation of that objective function:

"…as I am a level I ESE, I am told at the monthly manager meetings [at the SOH] 'your approach is P&P.' But when they come to see my performance, [they say] 'number of outpatient visits, number of finished treatments, etc.' I wonder why they focus on that indicator if they tell me that I have to carry out P&P [activities]. There is no coherence there."

The problem of multiple principals other than the SOH is recognised by the managers, but as shown in chapter 8, managers did not consider it made it impossible to run the ESE, i.e. these principals did not cause a large enough interference to deviate their agenda. But they acknowledged the influence of the SOH on their agendas, as shown before, in terms of shaping the supply of services in the city, keeping network coordination and making sure their autonomous decisions would not affect other ESEs and cause a negative sum game.

The lack of a clear and uni-dimensional objective function for ESEs was also commented on in chapters 7 and 8 and in chapter 2. Whereas some managers considered the objective function of the ESE was to maximise social welfare, others considered it was to guarantee sustainability. The SOH also mentioned that sustainability of ESEs was its objective function. But as shown in chapter 8, it seems more plausible to argue that the objective function is to maximise revenues.

In the end, the lack of a clear and uni-dimensional objective function makes it more difficult to measure the agent's performance and compliance with the principal's diffuse interests. As noted with the quotes above and in chapter 7, performance ends up being assessed with easy-to-measure structure and process indicators, as well as outputs. Performing well on these indicators does not necessarily optimise the principal's objective function.

A clear point that is left unexplained by agency theory is how the inadequate allocation of property rights influences the behaviour of decision-makers. Interestingly, only the manager of IIA recognised the lack of an identifiable residual claimant for ESEs:

"…public goods cannot be administered by fervor, dignity or personal pride, but thinking in…there is an important point: public organisations do not have a residual claimant, and one has to feel oneself committed to this."

Although an SOH officer said that two managers were fired before 2001 for charges of corruption, none of the 22 managers interviewed recognised or even suggested that corruption, as a way of privatising residuals, was a real problem. It can be said thus, that managers had alternative motivations to perform well, either for career concerns or for self-serving, but neither of these motivations, or those related to corruption, were openly admitted.

The low-powered incentives typical of public sector organisations, are exemplified in the statement from an SOH officer that was previously quoted in chapter 8:

"…unlike in the private sector, a wrong decision [of an ESE manager] does not end up in the owners capitalising the company (...) all the bad things are the responsibility of

the SOH. (…) it is clear that outcomes ought to be the responsibility of the manager and his team, either good or bad outcomes. Were it the case, it wouldn't be a problem. But the problem is that the good outcomes are theirs and the bad outcomes are the SOH's. (…) it could be expected that the market will make them react, but that is false."

But this statement has to be contrasted with the strong effects of the payment mechanisms, which exerted high-powered incentives. Another SOH officer pointed out that:

"…when we left the historic budgeting mechanism and adopted the FFS mechanism, we strongly prompted them to bill. (…) Part of what made a good manager was to see who was able to bill more [services to the SOH]. Then [when we shifted to FGPP] they tried to keep billing and pressed the SOH to reimburse the bills. Then they cream skimmed their product portfolio: they restricted whatever could not be billed, and worked hard on what could be billed."

And this same officer commented on a test they performed to verify the effects of the payment mechanisms:

"…many ESEs denied beds to the SOH [for uninsured patients] when they were paid by FGPP system because they preferred to have beds available, even for capitation contracts with ARSs because the ESE was better off. We decided to run a test from the CRU[1] with a hypothetic [uninsured] patient [asking for a bed], and the bed was denied. Later on, we called to ask for a bed for an identical patient but from an ARS, and the bed was assigned."

Therefore, it seems that the payment mechanisms exerted a strong incentive effect on ESE managers. However, how should these responses be understood in light of the lack of property rights and a clearly identifiable residual claimant? An SOH officer pointed out that:

"… perhaps the only true incentive [for good performance] was prestige."

[1] Center for the Regulation of Emergencies (see chapter 4 for a more detailed description).

This reference to prestige clearly refers to career concerns, as managers did not want to be seen to fail, in order to increase their chances of reelection and other future career plans. Peer pressure, as seen in chapter 8, also reinforced this commitment to good performance. In addition, it is worth mentioning that the election of ESE managers, at least for the last three district administrations had been meritocratic, so career concerns were mostly focused on good managerial performance. This was clearly recognised by most managers.

9.2.Property rights theory

A major flaw in the application of property rights theory to public organisations is that the lack of a clearly identifiable residual claimant makes it unlikely that allocating residual claims to intermediate agents solves the agency problems the same way it does in the private for-profit sector. According to Hart (1995), hospital autonomy transfers residual income rights to managers, but residual control rights are still in the hands of the community, which is the ultimate principal. In addition, the quote from an SOH officer shown above demonstrates that residual claims are not fully transferred to managers, because they do not face the losses of negative outcomes. It is also difficult to avoid that managers pursue personal goals at the expense of social welfare, just because the lack of an objective function, like profits in the private sector, leaves room for the possibility that personal rewards for the manager are not aligned with social welfare.

This apparent lack of control makes alternative accountability devices more important, as has been shown in chapter 8. The risk of expropriation of rents is therefore reduced by explicit mechanisms as well as by informal mechanisms, as explained by an SOH officer:

"… in order to prevent the manager from using the ESE for his own benefit, other stakeholders also interplay: controlling agencies of the government and hospital workers (who knew the internal problems of the ESE). [In addition,] the fact that the election of the manager was less influenced by politics opens more room for effective control within and outside the ESE. In contrast, there is more political influence now [with the new administration that started in 2004] and it makes the environment a bit different now."

But even if the risk of expropriation of rents were reduced to zero, it does not guarantee an adequate alignment of incentives. Managers' ability to respond discretionally to the incentives of payment mechanisms can be used as a test for personal agendas. For example, overproduction and demand inducement as a response to FFS payment reveals that managers are motivated to show "good performance" at the expense of social welfare.

"…between 1996 and 1999 the SOH paid on a fee-for-service basis, and some ESEs doubled their billing cap and grew quickly. They paid [doctors] on a piece-rate basis and some specialists made 30 to 40 million Colombian pesos[2] per month. These ESEs wanted to keep that [dynamic], with the argument that they were the efficient ones, the ones who should survive, but this situation could not be supported by any system. We found that for Intensive Care Units, pulse oximetries were costing us more than doctors' fees. They carried out oximetries every hour."

And the response to the shift from FFS to FGPP also revealed a strong tendency to respond to incentives, in order to maximise revenues, as told by the same SOH officer:

"…the shift [from FFS to FGPP] hurt them. Later on we set the billing caps, because they learned to bill and to work the package: if a patient showed up at the A&E service, they kept him for 24 hours to charge the inpatient day."

These two examples of excessive response to incentives illustrate that some ESE managers perhaps were concerned with maximising revenues to guarantee financial sustainability of the ESE, but not necessarily social welfare. Accordingly, granting to the ESE the right to retain surpluses (which is an incomplete type of residual claimant status) did not improve the chances that managers maximise social welfare.

This concern was raised by the manager of IIIB, who complained that the culture that Law 100 brought to public hospitals was a success-based culture. It pushed ESE managers to show good performance in terms of outputs, or revenues, at any cost. He complained that:

[2] About 15,000 USD

"… the new paradigm of the manager is represented by [the manager of IIIC]. He is the product of a success-based system (…) where it is not enough to be the best, to work 18 hours a day, (…) He is "successist", he wins them all, he never loses. (…) when the SOH carried out a micro-olympic games, he hires high-performance athletes during the time of the games to win them all."

Surprisingly, managers talked about profits all the time. For example the ambulance contracts were considered profitable, and some managers considered the PAB contracts were also profitable. Regarding the product portfolio of his ESE, the manager of IIB said:

"…some services are not in a cost-benefit equilibrium. For example, clinical laboratory is very costly for the ESE (…) but it is an essential service that is required for other services to work, e.g., maternal deliveries. The less profitable services are leveraged by other more profitable services, like gyneco-obstetrics."

IIIC manager's insistence on the profitability of the ESE as a reason to reduce influence from the SOH, as commented, also illustrated managers' concern for profits. However, IIIC apparently made profits by cream skimming, as noted in chapter 7. It raised criticism from neighbouring ESEs, as the one quoted from IIIA in chapter 8.

But the experience of IIIC also shows why profits were so important for managers:

"…IIIC has had [a high level of] autonomy because it is a profitable enterprise. It has grown strongly and profits have been used to build five operating rooms, this administrative building, it has grown on all sides."

A lack of adequately allocated property rights explains why managers found no strong incentives to reduce transaction costs if this did not contribute to maximise revenues for the ESE. That is to say, when managers were interested in reducing transaction costs it was because it increased the chances of bringing more revenues to the ESE, not because they were interested in reducing overall costs.

9.3.Public choice theory

Although ESEs were given diverse extents of decision rights and residual claims, they still kept their public orientation. As said above, their public nature means that they do not have a single-minded residual claimant with a clear objective function that is observable and verifiable, as it happens in the private for-profit sector. Accordingly, analysing ESEs through the prism of public choice theory to test for its adequacy in predicting the observed phenomena is warranted.

According to public choice predictions, ESE managers should be viewed as self-interested public bureaucrats. This prediction is supported by the evidence on career concerns and peer pressure shown before. Peer pressure among managers to show a higher level of autonomy, which was demonstrated by not needing performance agreement bailouts, or by increasing outputs and revenues to reduce dependence on the SOH, was a strong, yet informal, accountability device. The success-based culture that was mentioned before is a good illustration of this peer pressure; in addition, an SOH officer commented that:

"…[peer pressure] was not explicitly imposed by the SOH but it arose among managers, partly because the Secretary of Health said that performance agreements were meant to adjust inefficiencies, and not necessarily structural but also functional inefficiencies."

Career concerns have been shown to be relevant in determining managers' performance. As pointed out in chapter 6, managers were concerned to show good performance in order to improve their chances of being reelected, and they also were more prone to cooperate with the SOH in order to win the support of its representatives at the Board of Directors, and the Secretary himself to have their names proposed for reelection. It was also mentioned in chapter 8 that the only instance where career concerns were explicitly acknowledged was in a negative sense, when the manager of IIIA said:

"…everybody is watching you. (…) I work and push things forward whatever it takes, but I know everybody investigates. One moves, indeed, to protect one's CV."

An indirect test for the claim of career concerns as a driver of good performance is the persistence of managers in their jobs, or their promotion to higher-level positions. The

district administration that started in 2004 promoted the managers of IC and IB to high-level positions at the SOH. The manager of IIC was not reelected, but he got a job at the ministry of health. The manager of IIA was elected for the same job at IIIB, the largest hospital of the SOH network. The manager of IJ was appointed Secretary of Health in 2005, although shortly after he was fired because of a big problem caused by improvisation. On the side of the manager of IIIC, the one that has been showcased as the successful role model for other ESEs to follow, his ending was not so happy. In fact, he was a victim of a conspiracy from members of the ESE labor union, who made a big scandal in the media for poor patient safety standards.[3]

Regarding the self-interested inclination of bureaucrats to increase the budget, it was also evident that ESE managers resented the SOH's attempts to contain their growth and they were very proud when they achieved significant growth in capacity or in level of complexity. The dispute between the manager of IIF and the SOH was a good illustration of this conflict. The manager of IIF said that:

"…the main restriction [the SOH applied] was to dwarf growth through a billing cap (…) when we are in a locality that shows a high demand (…) on the side of the uninsured and SS. This restriction did not allow us to increase the budget, therefore it restricted the growth of the ESE. And it was not for creating overcapacity; it was just to satisfy demand. (…) I believe [the SOH] wanted a level I ESE with capacity and infrastructure to cater to locality VI, one of the smallest localities in the city. But we realised from the beginning that it had to be an ESE that, without dismissing level I activities, it must grow as a level II ESE for the southern network. (…) and the numbers have demonstrated that; this ESE has shown a very high growth, which meant that there was a demand, and that it was necessary to strengthen some services."

But the SOH had a different view of how ESEs must grow in a coordinated fashion, as pointed out by an SOH officer:

[3] The conspiracy consisted of filling gentamicin vials with formaldehyde at the newborn ward. The ward nurses have to routinely pour drops of gentamicin on newborns' eyes to protect them from eye infections. When they realised they were pouring formaldehyde, 15 babies had already been affected by the confusion. A big media exposure ended up with criminal charges against the manager, but a further investigation determined that it was a conspiracy, and the perpetrators were caught and taken to jail. The manager was freed of charges one year later but his image was seriously hurt.

"…It is clear that, as the local health authority, one has to guarantee that the network grows with complementarities. [ESEs] all want to set up operating rooms, increase their level [of complexity], acquire the latest technology, but the city might need other things. I have a city-based view. There is a tradeoff here between a city-based view and their individual views"

The tendency to increase the budget was partly reduced with the policies implemented in 1999 and 2000, mainly: 1) pushing under-producers to increase output to reach the billing cap; 2) denying excess billings to some overproducing ESEs, or 3) granting limited expansions to billing caps to other overproducing ESEs. In fact, increases in billing caps were carefully analysed by the SOH, based on past performance and realistic expectations of growth. By the year 2000 the SOH itself also did a good job in staying within the overall health care budget. Some managers had a cynical view of this, as illustrated by a quote from the manager of IIIC:

"…the [Secretary of Health] is in a good position vis à vis the Mayor when he says 'I am returning X amount of money.' Last year he held CP$ 160 billion and only CP$ 60 billion out of that money were returned to ESEs. (…) And the District Director of Budget says 'how come hospitals are running deficits and the SOH is returning money [to the District]?' (…). The SOH audit contracts [to audit the SOH-ESE contracts] are very large, but they reap high profits because they generate denials, money that is not paid to the ESE but is held at the SOH and returned to the Secretary of Finance."

As discussed in chapter 7, the hardness of the SOH budget varied depending on variations in local authorities' objective functions.

Another prediction of public choice theory is that overall public expenditures show a tendency to grow persistently. This can be predicted because a progressive taxation scheme means a lower tax price for low-income individuals, so they face a higher marginal utility of public expenditures than the price they have to pay. In addition, public bureaucrats' self interest leads them to expand the budget as a source of power, which they can do because of lack of competition. This prediction was clearly confirmed by the available evidence. The quote of an SOH officer that has been shown several times in the previous chapters, makes clear this point:

"Expenditures end up being absorbed by the SOH, because hospitals are [never] shut down."

Another SOH officer commented that:

"…although the open agenda [of the SOH] was to make ESEs become efficient, the hidden agenda was that no ESE was to be closed, and this made incentives weaker."

In addition, SOH officers acknowledged the pressure of the community for more points of service and less out-of-pocket payments to reduce time and money costs of accessing care, as commented by an SOH officer:

"…It is normal that people want their problem to be solved. People don't worry about being referred [to other ESEs]; what they care about is that the network functioning is transparent for them (…) otherwise it would be necessary to build a level III hospital in each place of Bogota, which is impossible. (…) However, what we currently do is that we send the patient, he has to queue again, wait for a new authorisation, and wait to see if he will be given an appointment. When this is the case, anybody wants a hospital close [to the place of residence]. (…) there is a trade-off between economic sustainability and social legitimacy. I can open services free at point of service, put 50 doctors 24 hours, but that is sustainable until I run out of money, but everybody is happy at the neighbourhood. So we [the SOH] are responsible for keeping that tradeoff at the forefront."

The role of politicians can also be better understood from the perspective of public choice theory. It was shown in chapter 8 that local politicians exerted pressure on ESE managers to control the short-term jobs available. It was also shown that some ESE managers played strategically the game of political patronage whereas others were openly opposed to such behaviour. Accordingly, the role of politicians as principals of ESE managers was played in terms of political patronage, as exposed by an SOH officer, commenting on the first months of implementation of FGPP when the SOH faced a strong opposition from the city council:

"…there were mechanisms of pressure [on the side of ESE managers] (…) like finding friends at the controlling agencies of the government to open an investigation against

the Secretary; or making friends with City Council members to have them call one to debates at the Council. There were Council members who were advocates of the issue [of defeating the FGPP] and who were interested to be on good terms with some ESE managers."

The hidden agenda of not closing hospitals is also in line with the predictions of public choice, particularly that of politicians' concerns for reelection. It implies making sure that ESEs have revenues to pay for their fixed labor costs independently of their output. This prediction can be illustrated with the quote from the manager of IIC regarding PAB contracts:

"... if I do not have a PAB contract I have nothing to do with an environment technician whose only skills are spraying [insecticides] and rodent control."

It is also confirmed with the findings shown in chapter 6 regarding the role of the billing cap as a mechanism to assure the Minimum Essential Expenditures for each ESE, and adding the balance via Performance Agreements for those ESEs unable to reach the cap.

Another finding that revealed politicians' concern for avoiding hospital closures was the passage of Law 715 and the previous regulations regarding compulsory contracting of 50% of ARS premium with public hospitals, a protectionist measure that contradicts the market approach of Law 100.

The quotes from SOH officers give the idea that, as bureaucrats, they have a long-term agenda independent of the short-term agenda of politicians. However, it is clear that the Mayor is a publicly elected bureaucrat, and as shown in chapter 8, he is interested in extending power to his allies for the next election, so he is better off if he satisfies his voters.

A last point that has to be commented on is the assumption of public choice theory about public bureaucrats' and elected representatives' lack of altruistic motivations. It was found that some managers, like IB openly stated their objective function as maximising community welfare, no matter the ESE was profitable or not:

"…we are a social enterprise, and as such we have to do that because there is no other provider to take care of [the uninsured].(…) our raison d'etre is not economic profitability but to deliver a service.(...) we are a social enterprise. We do not have a profit motive, but neither we have a loss motive [i.e., making losses is not our objective]. "

The manager of IIA also pointed out that:

"…the ESE has to be managed with a social orientation, we have to satisfy demand."

Even the manager of IIIC, who talked more explicitly about profitability, acknowledged that social welfare was the ultimate objective function of the ESE.

9.4.Summary of findings

According to the findings reported above, agency theory adequately predicts an overresponse to high-powered incentives inherent in payment mechanisms, and other *ex-post* agency problems that create transaction costs. However, these costs are not adequately dealt with because of the inadequate allocation of property rights that retaining surpluses implies. The problem of multiple principals and multiple tasks, as well as the lack of a unidimensional objective function add to the agency problems that were found. All these problems point to the fact that career concerns were a strong driver of good performance, which were reinforced through a peer pressure environment that reduced the chances of managerial failure. The role of career concerns and peer pressure suggests that managers are motivated by individual realisation rather than by purely social welfare, as predicted by public choice theory. However, some managers seemed to include social welfare in their utility function. Public choice also adequately predicts that ESEs exert pressure to increase their budget, but the SOH strikes a balance between hospital performance and voters' wishes to keep hospitals open. The role of politicians outside the district administration is also adequately predicted by public choice theory, as they prefer to satisfy the wishes of their voters by avoiding hospital closures, which implies tolerance of hospital poor performance.

To summarise the findings of this chapter on the usefulness of the TCE framework, the propositions set out at the beginning are tested against the reported findings:

- **Proposition 1**: Regarding agency theory, the lack of a clear and uni-dimensional objective function adequately explains ESE managers' response to autonomy, as agents to the SOH and ARSs.

This proposition is confirmed, as the lack of a clear and uni-dimensional objective function made it more likely that the agent's performance was measured by indicators that do not necessarily maximise social welfare. Therefore, ESE managers had plenty of room to over-respond to incentives, thus generating agency costs. At the same time, managers had little incentive to reduce transaction costs in their relationships with purchasers.

- **Proposition 2**: Regarding property rights theory, the lack of an adequate allocation of property rights explains why some ESE managers do not invest time and effort in reducing transaction costs in their relationships with payers.

This proposition is also confirmed, because, not being allowed to privatise the benefits of reducing transaction costs, ESE managers only invested effort in such reduction when it led to increased revenues.

- **Proposition 3**: Regarding public choice theory, politicians' and managers' interests other than improve hospital performance explain the lack of a role of transaction costs in shaping the relationships between ESEs and purchasers.

This proposition is also confirmed. Politicians wanted to avoid the political costs of closing hospitals, which made the soft budget constraint problem linger, although some restrictive measures on the SOH side were found to limit the scope of this softness. Managers' self-interests also led to hospital outcomes that did not necessarily result in aggregate welfare maximisation, except in the case that managers' utility function is aligned with maximising aggregate social welfare.

Discussion

As noted in the previous three chapters, there is a TCE related rationale for the PPS in public health care delivery networks: it is assumed that the transaction costs of contract-

based relationships are lower than those of the vertically integrated ones. However, it was also shown that, even in the presence of transaction costs, mostly related to contract incompleteness, the SOH and the ESEs did not choose a governance structure with the aim to reduce transaction costs. ESEs rather try to reduce their dependence on the SOH by increasing their revenues from other purchasers. In addition, the bilateral monopoly that is observed in all the SOH-ESE relationships is not the result of a choice of both parties to reduce transaction costs, but it is the result of an *ex-ante* bilateral monopoly, given the preexisting ESE status as provider of last resort, and the preexisting SOH commitment to keep the public network as a proof of its concern for the welfare of citizens.

It could be argued that influence activities are an example of transaction costs in a vertically integrated structure that justify the shift to a contract-based relationship. The argument put forward by Harding and Preker (2003) suggests that shifting to a more disaggregated structure avoids the direct influence of interest groups "when no decision maker has the authority to make decisions that service providers can easily influence." In addition, Althaus (1997) clearly states that one of the reasons to advance NPM-type reforms in New Zealand was to avoid the capture of central power by dispersing decision making to the bottom. A more general argument is Frant's (1996) proposition that shifting to arms-length (i.e., de-politicising) relationships will make it harder for politicians to keep direct control and respond to high-powered incentives.

The expectation of reducing capture by dispersing decision making is partially confirmed by the evidence. Regarding labor unions, as shown in chapter 8, it was evident that their bargaining power was severely reduced and that trans-organisational unions were less able to exert pressure on multiple decision makers, i.e., the ESE managers, as compared to the previous situation where they exerted all the pressure on a single head, the Secretary of Health or the Minister of Health. But regarding politicians, the findings show that disaggregating the organisational structure just shifts the focus of influence from the top to the bottom, and they still keep their ability to influence decision making.

Regarding relationships with ARSs, transaction costs were shown to have little effect in shaping governance structures in the case of level I services, because compulsory contracting regulations granted ESEs a sort of monopoly power, which reduced their

need to economise transaction costs. And investing in RSI like P&P for the capitated population was not seen as a source of transaction costs by some ESEs that had a view of these investments as strategically important. Perhaps the only situation where transaction costs were found relevant in shaping the relationships was between ESEs and ARSs for level II and III services. Here, the parties tried to build trust and to cooperate, and the most important gain from these governance structures was the reduction of the costs associated with incomplete contracts.

Having found that transaction costs are relevant only in the third case described before, it is pertinent to raise the question: why is the TCE framework rather useless to explain the observed behaviour of ESEs and purchasers? One plausible explanation is the lack of an adequate assignment of property rights (Althaus, 1997). In fact, TCE assumes that the parties are interested in economising transaction costs, because they can reap the benefits in terms of higher profits. Social welfare is maximised because reducing transaction costs will lead to optimal investment in RSI and lower costs associated with incomplete contracts. But if property rights are not allocated to any single person or group of persons with exactly the same objective function (profits, in the private for profit sector), it is unlikely that the agents gain anything from reducing transaction costs.

This is a major challenge to the assumptions of the NPM approach, which are reinforced in Robinson et al (2005, p. 4). NPM assumes that the PPS is a reasonable way to reduce the transaction costs associated with vertically integrated structures. But, beyond the lack of evidence on lower transaction costs of contract-based relationships, NPM does not acknowledge the lack of adequate assignment of property rights. Perhaps the new wave of Foundation Trusts in the UK is an example of how to bridge the gap of ownership, by involving the community more directly with decision-making at the hospital level. This level of involvement gets constituencies to play the role of "owners" in a way more akin to the role of shareholders in a private company.[4] However, this arrangement is nonexistent in the case of Colombian ESEs.

Another important departure from TCE is the fact that RSI played a minor role in creating the risk of hold-up. It was found that the largest share of transaction costs were

[4] This assumption has been criticised by Klein (2003) who points that the community constituency is vaguely defined and such vagueness opens room for special interest groups to capture this constituency to advance its narrowly minded agenda.

those related to contract incompleteness. It is clear from the TCE literature that contract incompleteness is relevant as long as contractual terms cannot reduce the risk of holdups in the presence of RSI. But RSI is always taken as the main factor, without which contract incompleteness is perhaps less important. As mentioned in chapter 2, Williamson's point in this regard is still largely unmodified today.

But in contracting for health care services, information asymmetries are much higher than in other markets, which makes *ex-post* inefficiencies larger, the less they can be dealt with in contract minutes. *Ex-post* inefficiencies are basically those related to the responses of providers to payment mechanisms. Information asymmetries allow providers to heavily induce demand under FFS payments and heavily skimp on care under prospective payments, without any meaningful ways on the purchaser side to adequately control these excessive responses unless it incurs high monitoring costs. Accordingly, a clear contrast with Williamsons' argument arises here: He argues that in the presence of bounded rationality (which is surmised here as information asymmetry) and opportunism (which is evident here as over-response to payment mechanisms) but no RSI, correspond to a state of affairs where "...Parties to such contracts have no continuing interests in the identity of one another. This describes the world where discrete market contracting is efficacious, where markets are fully contestable." (Williamson, 1985, p 31). This prediction is not supported by the evidence of this research.

It was shown in chapter 7 that purchasers reduced contract incompleteness by focusing on measuring outputs, which are observable and verifiable, and their lack of concern for technical quality made it unnecessary to invest in the high costs of monitoring to guarantee good quality health outcomes. Therefore, the transaction costs of *ex-post* inefficient behaviour causing poor health outcomes, end up being dealt with as if they were an externality, in fact, a negative impact on the burden of disease. This is no less than paradoxical in the case of the SOH, because it represents the wider context of social welfare, where all externalities must be taken into account in the calculations of costs and benefits.

Alternative explanations to the findings might be found in agency theory. However, the predictions of this theory regarding the *ex-ante* effort to make contracts as complete as possible and the *ex-post* solutions to uncertainty and information asymmetries, also rest

on the assumption of adequately assigned property rights (Althaus, 1997). But for the case of the public sector, why should agent and principal invest effort in achieving an *ex-ante* complete contract to reduce agency problems, if they cannot reap the benefits of doing so? Agency theory also predicts that if any gaps in the contracts are left, they will be filled *ex-post* with the alignment of incentives that an adequate allocation of property rights confers. But the fact that neither the SOH nor the ESEs can privatise rents makes this assumption untenable for public sector organisations.

A straightforward application of agency theory to the public sector, proposed by Tirole (1994), provides some relevant explanations to the research findings. On the one hand, Tirole proposes that the lack of a residual claimant opens room for expropriations by private interests, and the best way to deal with this is to put several principals above the agent; it is desirable that these principals have opposed interests so that each principal oversees the agent to avoid his favouring other principals. However, this desirable structure creates tensions and difficulties of coordination between principals, hence Tirole's claim for the intrinsically dysfunctional structure of the public sector.

The findings of this research regarding the multiple-principal problem confirm Tirole's argument. In fact, the way the Boards of Directors are structured clearly illustrates that three major interest groups with differing agendas have incentives to monitor the manager's behaviour with the other principals. However, the problem as shown in chapter 8, is largely reduced because of the dominant role of the SOH and Mayor representatives. The other principal that exerts influence on the manager's agenda but does not participate in ESE governance, is the local politician. Although politician's role as overseers is clearly determined by their interest in taking control over jobs and contracts, they still can work as an accountability device.

The other issue that can be analysed through the prism of agency theory is that of the multi-task agency problem modelled by Holmstrom and Milgrom (1991). It was found that ESE managers face multiple tasks with diverse degrees of observability and verifiability, e.g., increasing outputs, increasing revenues, increasing productivity, decreasing idle capacity, increasing patient satisfaction, reducing access barriers, providing good quality services, and ultimately, improve people's health. Although some of these tasks are measurable, others are not; in addition, the degrees of emphasis put by the several principals differ, and change over time. According to Holmstrom and

Milgrom (1991), if managers face multiple tasks, they will focus their efforts on the ones that are more measurable, at the expense of the less measurable ones. This was in fact confirmed by the findings, when managers commented on the excess emphasis on outputs, irrespective of the impact on health or at least some level of concern for quality health outcomes.

Tirole (1994) and Frant (1996) also point out the undesirability of putting high-powered incentives for the provision of experience goods as compared to search goods. Most health care services are certainly experience goods, and his predictions about undesirable responses of the agents are confirmed with the findings of this research. These predictions are also proposed by Hart et al (1997) and by Eggleston and Zeckhauser (2001). The striking finding is that their predictions apply to the case where the government contracts out with private parties, whereas ESEs are public entities. However, according to the findings, ESEs behave like private contractors as shown by their over-response to the incentives of payment mechanisms. This suggests that ESE managers behave like revenue maximisers as suggested by Feldstein (1993), or in line with the predictions of Chalkley and Malcomson (1998), they behave like purely selfish contractors, as discussed in chapter 7.

This striking finding begs the question of why ESE managers are motivated to maximise revenues. On the one hand, it is clear that they want to make surpluses because it allows them to reduce the oversight of the SOH and make investments to widen their service portfolio to serve the SS market. But this motivation still leaves unexplained why they would want to pursue those goals. Therefore, a more fundamental explanation needs to be found. Corruption for the privatisation of surpluses was not found to be such an explanation, or at least was not openly acknowledged. One more plausible explanation is proposed by Tirole (1994) in his argument about career concerns. It was clear from the evidence that managers care for their performance vis à vis their peers, and this environment of peer pressure creates strong incentives to improve performance, to avoid the bad reputation of being inefficient or incompetent. Career concerns are also confirmed by the promotions observed in some managers and the reelections of other managers. A public ethos of social service could also help to prevent managers' self-satisfying behaviour, but not having explicitly explored this in the interviews, it can only be said that some managers had a clearer social welfare

maximising objective function than others, and their values probably reflect those of a wider public ethos.

However, career concerns as drivers of good performance do not guarantee that social welfare will be maximised. In fact, career concerns make managers focus on those tasks and outcomes that are more likely to be rewarded with job promotions. It is thus expected that career concerns will lead to social welfare maximisation only in the unlikely case that managers have that component within their utility function, and at the same time are able to perform well in the spheres that are rewarded by their peers and superiors. The manager of IB is a good example of this unlikely combination: the ESE was successful in terms of those attributes the SOH were concerned with (outputs, productivity, financial sustainability, patient satisfaction, etc) and at the same time it was able to provide uncompensated care and invest in strategies to improve health at the community level, no matter they were long-term-effect strategies. But in the case of managers who do not include social welfare in their utility function, lack of concern for best quality outcomes on the purchaser side opens room for the realisation of career concerns without the maximisation of social welfare. In fact, excess concern for profits (which, as argued above, are ultimately converted into higher outputs and revenues), may not be appropriate to improve social welfare if it stimulates inefficient behaviours like cream skimming, code creeping, demand inducement and skimping on care.

To summarise the lack of predictive power of TCE theory and the limited predictive power of agency theory, property rights theory provides the strongest explanation: the lack of an adequate allocation of property rights explains why the parties were weakly motivated to economise transaction costs, and why *ex-post* inefficiencies were not adequately dealt with. In this lines, public choice theory appears to provide a more robust explanation of the findings.

Some of the predictions of public choice theory have been commented on through the previous theories. The issue of capture, as dealt with in agency theory, can be seen from public choice theory as proof that politicians and interest groups are self-interested and use bureaucrats to increase their control of jobs and budgets for rent-seeking and reelection purposes. Although it was not the case for labor unions, it certainly was for local politicians. As shown above, their focus of attention moves to the bottom as

decision making is dispersed to ESEs, and some managers are willing to play their game while others are openly opposed.

But the question remains regarding higher-level relationships between politicians and decision makers. It is particularly important to consider the relationships between the SOH and the City Council, where politicians hold the administration accountable for performance. As noted by the quote of an SOH officer, council members' political control of the administration can be used to shape the Secretary of Health's and the Mayor's decisions regarding funding and operations. The question thus remains as to how politicians' influence trickles down to ESE manager decision making. The findings suggest that the previous three administrations were rather autonomous from catering to politicians' pressures, and ESE managers recognised that the previous three Secretaries of Health did not exert undue pressures on them to deviate their agendas to satisfy politicians' interests. Thus, the previous three Mayors' policy to isolate decision making from the narrow minded interests of some politicians, was in fact reflected in the lack of undue influence on managers' autonomy.

But some managers and SOH officers acknowledged that the new administration that started in 2004 engaged in political patronage and was more lenient to cater to politicians demands. The administration itself was more actively involved in shaping the process of reelections of managers, to make sure these jobs were filled with their supporters. The timeframe of this research did not allow to ascertain the effects of this wider influence of politics on the behaviour of ESE managers, but it can be predicted that some of the achievements in terms of efficiency gains could have receded.

Regarding the key prediction of public choice theory with respect to the growth of public expenditures, it could be said that the confirmation of this prediction by the findings is an alternative explanation for the lack of predictive power of TCE. It could be argued that if politicians' only concern is to assure reelection, they will make unlikely that a hospital closes. This reduces the strength of incentives for efficiency and that is why improvements can only be made on a piecemeal basis. This point can be inferred from Hsiao (2000), who claims that health care spending by the government is a way of showing concern for the welfare of citizens, and from Healy and McKee (2002c), who argue that hospitals can be seen as a symbol of the survival of the welfare state. Both claims support the idea that hospitals are instruments of politicians'

strategies for their political survival, and that considerations of efficiency and performance are not necessarily at the forefront. Contracting PAB activities and some curative activities through ESEs even though lower prices are found outside them, and the hidden agenda to keep hospitals open at any cost, are in line with public choice predictions.

In fact, some of the investments managers want to incur imply a dedicated-capacity type of RSI. Their lack of concern for holdups in the case of SS, and their certainty that the SOH will not act opportunistically to hold them up, makes managers more prone to take risky investments or to convincingly argue for SOH to authorise capacity expansions. Nonetheless, it is clear that by the year 2002 the SOH succeeded in reducing the tendency of the budget to excess growth, and at the same time the SOH managed to stay within budget. Other fact that confirm this prediction of public choice theory is the contracting of PAB activities through the ESE, even though the ESE subcontracts them. This inefficient double contracting process is justified on the argument that the ESE has fixed labor costs that cannot be reduced, and the SOH has the commitment to "sustain" those inefficiencies.

However, the fact that the Mayor is publicly elected also explains some of the findings through the lens of public choice theory, because the Mayor has an incentive to respond to the wishes of his voters in order to assure the election of one of his allies for the next period (given no immediate reelection of Mayors). Interestingly, this fact would predict that the Mayor would have no incentive to force ESEs into budget discipline, to assure their sustainability or to fend-off politicians eager to control jobs, because no matter that these measures yield benefits in the long run, the costs are faced in the short run. So, why might the findings show that the Mayor of Bogota was willing to make policies with a long-term perspective, challenging the problem of time inconsistency raised by theory (Majone, 2001)?

It was clear that the district administrations between 1995 and 2003 had an explicit policy against political patronage and a commitment to goals with long-term benefits even at the cost of political resistance in the short term. Although the reasons for this behaviour were not ascertained in this research, it can be shown that these district administrations exhibited a threshold level of willingness to clamp down on ESEs, as evidenced by the hidden agenda of not closing down hospitals. Thus, the Bogota case is

an unusual case of politicians striking an equilibrium between achieving long-term goals and tolerating short-term poor performance. And this approach is reflected in the SOH bureaucracy, because the key officers are appointed by the Mayor, which assures alignment of agendas between politicians and bureaucrats. This explains SOH policies like bailing out ESEs via PAs but at the same time demanding strong measures to reduce idle capacity, or piecemeal reductions in billing caps aimed at a better match between local demand and supply.

Regarding the self-interested motivations of ESE managers, it was found that some of them openly expressed their concern for social welfare, in the sense of romantic politics[5] that has been the focus of public choice theory's criticism. This finding could be cynically interpreted as interviewees' desirability bias, or strategic responding, as it is politically correct to exhibit such concern, regardless of their real motivations. However, some revealed preferences confirm the social welfare concern of some managers, as shown in the case of IB. This raises the point of how much altruistic decision making prevails as compared to self-interested decision making. The only thing that can be said is that altruistic motivations are present, yet their level of intensity is still open to question.

A last comment on the justification to restrict the analysis to NIE theories is warranted. As shown in chapter 2, this thesis used the four NIE theories, starting with TCE given its clear relevance in analysing alternative governance structures, and following with the other three theories given their complementarity among them and with TCE. However, many other theories would have been helpful to analyse how parties to a contract interact. For example, game theory would have been useful to analyse how information asymmetries, reputation, or strategic behaviour influence the actions taken by the parties. Economic psychology would have allowed a better understanding of the behaviours of hospital managers and health authorities, as well as patients, the community and other stakeholders, in a more detailed way than the simplistic assumption of bounded rationality and opportunism. Social network theory would have been also useful to understand how the relationships between the players in a given network (in this case, the hospitals, their payers and the local health authority) influence their behaviour in a more comprehensive way than just the individual characteristics of each actor.

[5] The term "politics without romance" was introduced by James Buchanan (2003).

Although these and other theories could have been used for this thesis, it was not practical to use them all. Such a wide range of theories would have unnecessarily increased complexity by appealing to other disciplines like psychology and sociology, while their marginal contribution to the robustness of the analysis would have been limited. In addition, word count constraints would have made it difficult to achieve a reasonable level of detail if more theories had been considered. A better alternative was to focus on a set of theories that were complementary and allowed the researcher to address the research question from different points of view, yet keeping a common ground in economics.

Conclusion

This chapter analysed if, given the limited usefulness of the TCE framework, other New Institutional Economics theories help to explain the observed findings. As shown in chapter 7, transaction costs are present but do not shape the relationships between SOH and ESEs. They exert some effect in the relationships between ESEs and ARSs for level I services, and they work as expected by theory in ESE-ARS relationships for level III services.

Alternative theories within the realm of New Institutional Economics help explain parts of the findings, but the most plausible explanation for the lack of predictive power of TCE and the limited predictive power of agency theories is the lack of a residual claimant who holds the ultimate property rights. This inadequate allocation of property rights allows for the agent and the principal to focus on other objectives which not necessarily lead to welfare maximisation. Public choice theory fits much better to the findings, as ESEs still keep their public nature. As expected, managers were found to act as self-interested bureaucrats driven by career concerns, and politicians to exert pressure to keep control of jobs and budgets.

It can thus be concluded that autonomisation of public hospitals will not lead to the expected outcomes that TCE predicts in terms of reducing transaction costs or searching for specialised governance structures to economise transaction costs. This is a major departure from the expectations raised by NPM advocates, as the transaction costs of

contract-based relationships cannot be said to be lower than those of the vertically integrated structure. They are just different.