The Agency Problem in the Romanian State Owned Enterprise: The "Contractual Paradox"

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Abstract: *This article is an analysis of a "contractual paradox" which exists in the relation between an agent and a principal, in the presence of rent extraction. This case focuses exclusively on the State Owned Enterprise – SOE in Romania. If the model built by MC Jensen and WH Meckling examines the agency costs occurring in the presence of an information asymmetry and conflicts of interest between the agent and the principal, "the contractual paradox" that I consider in this article assumes that the "agent" and the "principal" cooperate to extract a rent/profit detrimental to a State Owned Enterprise and, in this case, the conflict of interest between the two disappears or subsists only as regards rent extraction and risks sharing. The "contractual paradox" refers to the coexistence of two agency contracts in the same State Owned Enterprise. The first is informal and the latter is formal. Both contracts are concluded between the same actors. The first transaction sets the rent extraction from the firm, while the second contract establishes the decision-making mechanism for the allocation of the firm's resources.*

The "rent" is not treated in this study as a surplus, as in Ricardo-Marshall model, but as a profit.

Keywords: corporate governance, agent – principal, agency costs, rent seeking, rent extraction

I. The Sub-Optimal Contracting

The lastingness of the captive institutions distorts the corporate governance pattern within the Romanian State Owned Enterprises in order to favour the rent extraction. For this reason, the principal – agent relationship within a State Owned Enterprise is established in two agency contracts, not in only one. The first contract is informal (T1), while the other one is formal (T2). The first contract sets the terms of the relation between the principal and the agent as regards the distribution of resources in the State Owned Enterprise as well as its future market transactions. The second transaction is endogenous, correlated with the first one, appoints the management of the State Owned Enterprise and establishes its organization.

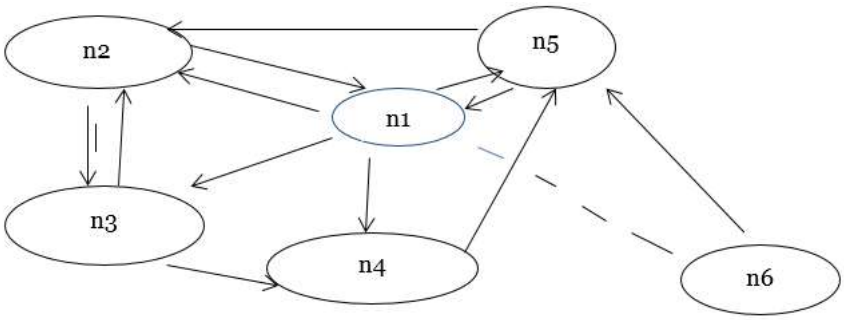
These two transactions are the source of the cooperation and conflict between the agent and the principal in relation to a risk assumed by both parties.

1.1. The Competition for Winning / Securing the First Agency Contract (T1) and the Future Prize (the Rent)

The agency relationship in a State Owned Enterprise is built on condition that the principal and the future agent are members of the same social network which could be a political one or an interest economic group, made up of a sum of actors. The social network is multiple by its nature because the actors of this network have a wide variety of interests tallied to the hierarchy of their own preferences. The actors of the network behave differently not only due to these interests, but also due to the constraints they face in order to maximize their utility and as a result of their propensity to risks. All of them might pursue a position in the Board of Directors or the position of executive director within the same State Owned Enterprise and for this reason they will enter in a competition. However, they might as well target a privileged relation with a State Owned Enterprise, procurement contracts, for example. At the same time, the actors have a central or marginal position in the network, and different ranks. Some of them could have several connections and thus they become a "node", while others are isolated.

The number of connections and their typology (communication, cognitive, affective, proximity, formal, financial) is not the same for all the actors of the network. The typology of links between among the actors determines their strength: strong or weak.

Therefore the principal and the future agent are in the same social network Rm = (N, L) which is a finite directed oriented graph consisting of n-1 actor („nodes") N = {n1, n2, n3, n4, n5, n6, n7, n8, n9 .....} and more edges L = {l1, l2,l3, l4, l5 .....} where L <n1, n2, n3, n4, n5 >.



The connectivity is bi-directional between n1 and n2, since the relations among these actors are based on mutual trust and gain. The connectivity among other nodes can be directional, bi-directional or non-directional, meaning that there are strong connections among certain actors (nodes) only. In the graph above are strong connections between n1, n2 and n5.

The policy maker/principal (noted "n1") determines who will be the agent in a SOE, but not in any conditions. The policy maker represents the State, therefore he/she acts as an "agent" for the State, but as a "principal" in relation with the person who will become the manager within the SOE, namely any of the nodes (n2, n3, n4, n5, except n6) if they will compete for the same position.

In this example, the distance between n1 and n2 is 1. The same is valid between n1 and n5. The „principal" n1 and the agents n2 and n5 are linked among them within the same network R. N1, n2 and n5 have equal degrees, as follows: Rm (n1) = 1 and Rm (n2) = 1, Rm (n5) = 1 and Rm is regular. L = {l1, l2,, L5} does not change unless Rm extends onto nodes {n3, n4, n5, n6, n7, n8, n9 .....} given that n1 becomes a "hub". If n1 becomes a "hub", he will use the same mechanism with each agent entering the network.

In the event that the network members n2 and n5 share the same target, for instance the manager position in a State-owned company, they will compete in order to win this position hoping for a prize (income) at least equal to the cost of the effort they made and with the expected utility.

The chance of winning the prize depends on each player's skills and on the amount they invest (G. Tullock model [1]). Their chances increase if their efforts are stronger, yet their chances decrease if other actors come into play. The competition takes place within a continuous and unequal distribution of costs (Fey)[2] , each actor having incomplete information about the other. The information asymmetry implies both the number of players entering the game, and the cost that they incur. Consequently, the two actors (n2 and n5) competing for the same position do not have a complete information about the costs incurred by each of them and about the rent they might gain, which they can only estimate.

The effort cost incurred by n2 and n5 will increase if other competitors come into play.

According to Tullock, D. and T. Houser Stratmann "PA = Ar / (Ar + Br) where r = 1, n2 and n5 are the two actors, P is the prize, while r is the parameter that shows the difference in terms of expenditure". If r = 1, then the chances of n2 and n5 are equal to the amount spent, and when r> 1 for one of the competitors, the odds are higher for this one, therefore the game it is not balanced any longer. The game is sequential and for this reason each competitor assumes a marginal cost, but the cumulative amount incurred may exceed the expected rent ("the prize").

Taking into account their utility function, each actor – competitor (n2, n5) can make unanticipated decisions, meaning that he has the option to continue the game or to leave it. If a player increases his effort (financially quantifiable), then he could eliminate, in every sequence of game, the other

[1] Tullock Gordon: The Welfare Costs of Tariffs, Monopolies, and Theft , Western Economic Journal, 5:3 (1967:June) p.224

[2] Mark Fey: Rent-Seeking Contests with Incomplete Information, Department of Political Science University of Rochester, September, 2007, pag.1

competitor and win the game, on the condition that the level of the rent expected to gain in the future is equal or higher than the costs incurred.

If during the game the number of competitors increases, all of them having chances to win, the degree of the rent dissipation is equally higher taking into account that a SOE can have several agents on the same level or on different levels (i.e. executive managers, members of the Board)

The arrangement underlying the informal agency contract intervenes among the principal (n1) (the policy maker) and those members of the network (either n2 or n5) who win the game and already have close and bi-directional connections when the opportunity arises to control a SOE. In this regard, I determined that first there is a social network in which the principal and the future agent belong. I also emphasized that the future agent competes with other members of the same network, estimating that his efforts will be rewarded with a prize which he had estimated at a value at least equal to the cost incurred in order to join the game and to the expected utility.

Once the competition among the actors of the network is over, the principal and the future agent (the winning competitor) enter a second game that makes the foundation of the informal agency contract (T1). This pre-existing transaction between the principal/ the political decision-maker (n1) and the future agent/manager (n2) relies upon an interdependence of expectations within a co-operative game with a non-zero sum, each of them trying to anticipate the strategy of the other, yet in possession of incomplete information. The T1 transaction determines the distribution of the rent extracted from the State Owned Enterprise.

The principal (n1) chooses his strategy depending on his own utility (U1) and on what he estimated that the agent (n2) aims regarding his utility function (U2), i.e. a „first order expectation" (J.C. Harsany) [3], as well as on what agent n2 thinks about his strategy in terms of the U1 utility function, namely „the second order expectation". The strategy of n1 depends on the second order expectation, while the strategy of n2 depends on the third order expectation. There is a mutual conditionality based on what each one thinks about his utility, but also the utility (U1, U2) envisaged by the other player. Not all the agency costs are taken into account at this stage.

The actors do not pursue the maximization of the company's profit. The „principal" (n1) is a policy maker (n1) with no ownership rights and residual rights in the State Owned Enterprise. He does not behave like an entrepreneur focused on the company's profit, but like a consumer. In order to maximize his utility, the principal (n1) will seek any pecuniary and non-pecuniary advantage he can get from the State Owned Enterprise, rough the hidden activities performed by the agent. The principal is subject only to political constraints enhanced by the social network he belongs to, not to public constraints.

Maximizing the State Owned Enterprise's profit has no positive effect on the utility function of the principal (n1) as a result of the efforts made by the agent (n2). For this reason there is no interest in increasing the efficiency of the mechanisms for monitoring the efforts made by the agent.

Under these circumstances, an informal "agency contract" (T1) is concluded between the future agent and principal (policymakers)

[3] John C. Harsanyi: „Games with Incomplete Information Played by BAYESIAN Players, I-III, Management Science Vol U No 3 November, 1967, page 164

(the "agreement") setting up the conditions which make it possible for the two parties to maximize their welfare, to improve the information system and to share the risks. Each actor will consider a utility reserve and a cost of the effort they have to make.

The informal agency contract (T1) is a "hub", i.e. that nexus around which is structured any contract in the State Owned Enterprise, including the formal agency contract (publicly known), as well as the networks of individuals who conclude a set of transactions. Under in the conventional Jensen and Meckling's model the goals pursued by the principal (for instance expansion, the equity increase) entails the (formal) agency contract and gives it substance, while in the case of a State Owned Enterprise the informal agency contract (T1) distorts both the organization of the firm and the formal agency contract (T2).

The informal agency contract is the source of the moral hazard that will appear at a given time in the company's financial results. The situation I describe is confirmed by the financial results of SOE's in Romania over the last 25 years that, except for a few ones, have constantly faced commercial and fiscal arrears and losses, while the agent and the principal inputs have been mostly unproductive. At the same time, the informal agency contract was the cause of the discretionary mechanisms for the selection of managers within the SOE, at least until the revision of the primary regulations in 2011 (GEO No.109 / 2011).

Taking into account that the ownership over the SOE is diffuse, the agent and the principal will not bear the cost of pecuniary and non-pecuniary benefits they consume; consequently this state of property right over SOE, there is an opportunity to maximize their own welfare. With each unit consumed by both actors, the firm value will decrease. In other words, there is a dissipation of the company's income. In the SOE with a monopoly rent or a dominant market position and with a relatively constant profit, the opportunity to extract a rent is higher compared to those SOE that supply rival goods.

For this reason, the rent-seeking competition is stronger within the State-owned companies that hold a legal monopoly in comparison with the firms that supply rival goods and have not been privatized. This can be verified by comparing the financial data of State-owned Enterprises. For instance, between 2012 – 2014, the Transgaz company which holds a monopoly on natural gas pipeline transport recorded a total cumulative debt of 1,3 billion RON (295 MEUR), revenues of 1,3 billion RON (295 MEUR) but with a deferred income tax of approx. 80 mil. RON. Transgaz agents were paid approx. 7 mil lei (1,69 MEUR/year) with an increasing trend every year. This company does not have a negative cash flow because it enjoys a monopoly rent. In 2013, the profit of the Transelectrica State-Owned Company (energy transport monopoly) was higher in comparison with the previous years due to the increase by 52,6% of the tariffs. The State-owned companies providing rival goods such as Termoelectrica and the National Coal Company went bankrupt, while and CFR Marfa (The Romanian Commercial Railway Transportation) recorded losses ever since 2007 until now.

1.2. The second agency contract (T2)

The second transaction, which is the "formal agency contract" in the SOE establishes performance criteria for the protection of the agent in case he loses his position.

Agent n2 receives an income calculated on the following formula : $v = r + \beta - c (e + e') + ⊚$, where r is the income received by n2

plus the utility reserve; β represents the incentive (bonus) for the effort made by n1 in favour of n2, as well as for the risk taken; c = the total cost of the effort made by n2; e = the obvious effort made by n2; e' represents the hidden effort made by n2, at an observable output (0.1). The revenue r does not depend on q, but β depends on q. At the same time, q depends on the observable and not observable effort.

In the case of a relation between the principal and the agent existing before the T2 formalizing based on the common agreement for a mutual gain (the rent extraction), the adverse selection in the agency contract (T2) is void of purpose. The principal does not have any incentive to make a probable estimation of the "signal"-type information neither ex ante nor ex post in order to check the agent. Moreover, in the absence of competition for the agent selection, the agent will not manipulate the information ("Signal") about his own abilities.

The principal has a neutral risk position, since he does not have any role in the company's management of which he wants to extract a rent as a result of his political influence, while the agent has a risk preference boosted by the first contract (T1) – the informal one. However, in any observable and unobservable activities, the agent will seek to share the risk with the principal. The agent's cost of effort is constant in the presence of symmetric information and the effort is bigger under asymmetric information conditions (the principal doesn't assure the agent against the risk).

In any situation, the State Owned Enterprise's strategy depends exclusively on the agent, so that any decision taken, for instance, in the Board, is influenced by the agent.

Trying to maximize his utility or to preserve it in relation to the cost initially incurred in order to win a prize (the rent), the agent has at his disposal "hidden information", which over time creates a power asymmetry with the "monitoring agents" (Board members), if they do not belong to the same network and possibly with the principal, if he assumes risks that have not been negotiated in T1 (informal contract).

The T2 transaction is incomplete, because the principal cannot monitor any future action carried out by the agent. The asymmetry consists of an information gap, because, through the second transaction/agency contract) the agent distributes the resources and takes risks. Therefore, in any circumstances the agent will have an opportunistic conduct, regardless of the original arrangements of the T1 agency relationship.

Therefore, if the initial phase between the principal and the agent involves a cooperation, a conflict situation will arise at a given time. Cooperation relies upon the convergence of interests and the conflicts appear depending on how opportunities are capitalized in the SOE in order to allow the rent extraction.

2. Consequences

The agent controls the inputs and outputs in the firm. Therefore, the rent extraction might be shown in the agency costs (e.g. compensation, golden parachute etc.) as well as in those transactions for the acquisition of the firm's inputs.

Identification of the rent extraction cannot be done directly. Most times it takes a preliminary investigation of the inputs and outputs for each activity of a firm, to identify the rent extraction. Data Envelopment Analysis method is an example which can be used.

2.1. Agency costs

As regards the SOE, the structure of the agency costs is not the same, because the hierarchies are inverted, meaning that maximizing the utility of the principal and of the agent is more important than maximizing the company's profit. This situation stems from the fact that the agent and the principal have no residual rights that could correlate their income to the company's profit. Consequently, there is no conflict between the principal and the agent as regards the hierarchy of priorities (maximizing the profit versus maximizing one's own utilities); instead, there is a conflict as regards the way of the welfare maximization and risks distribution.

Given that there are two (2) agency contracts - the informal one (T1) and other formal / "enforceable" (T2) then, the agency costs may include the compensation of the agent, "the monitoring cost" which is the board members compensation, but not the residual loss. The last is not estimated.

Although it is referred into the second agency contract (T2), the compensation of the agent intended to reduce the moral hazard in both T1 and T2 agency relations. The agent's compensation must be equal to or greater than the previous cost covered by this person when she entered into the competition to win her present position. This compensation is not similar with a risk premium paid to an agent in a private listed firm. Agent compensations in a state owned firm don't include securities such as shares in the firm or "stock options", whereas the local stock market has a low capitalization.

The principal aims the agency contract T1 (an informal contract) and secondary the agency contract T2, which is a formal one. The principal will monitor the agent's actions, so as to ensure maximizing of his utility.

The principal will engage the state owned firm into a cost that includes pecuniary and non-pecuniary benefits for other agents who are members of the Board. This Board[4] has a hybrid role as principal transfers the power to the persons who set up the firm's strategy and a monitoring function of the agent/manager of the company (CEO). In this way, the principal mitigate a risk that can arise in relation to the decisions he might take instead of Board members. In these circumstances, the board plays a role in monitoring the agent actions? In no case, mostly if the agent is member of the board. The principal retains a semblance of legality.

If the agent / manager of the company/ CEO is member of the Board, and the state holds residual rights in the firm, the internal control mechanism is weakened or completely annihilated, as there is no clear demarcation between the agent /manager/CEO of the firm and the "monitoring agents", i.e. persons who are member of the Board and who should supervise the agent / manager/CEO. Besides, it matter if the agent / manager/CEO of the firm belongs to the same social network with "monitoring agents". Therefore there is an asymmetric position (stemming from the information) between the manager of the SOE and the "monitoring agents" (the Board members). Apart from that, whether they are or not independent or subject to a dependency relation towards the principal, the "monitoring agents" have no incentive for evaluating the activity carried out by the agent / the manager if the level of their reward is low. If the "monitoring agents" see no pecuniary advantage from the role assumed, their interest in monitoring the company's agent / manager fades away. The "monitoring agent" may behave in such a way as to diminish the risk whenever he has to make decisions on a par with the company's agent / manager, because the joint and

[4] The Board might be shaped in a traditional model or double tier (co-determination model).

several liability will urge him to censor the agent's / manager's actions or just try to get a rent from the State company, and this drives him into a transaction with the very actor he was supposed to monitor.

There are three factors whose impact on the monitoring of the agent is negative. These factors are the property rights, the structure of the Board of directors (either in-house or external general manager) and the inefficiency of the rules on the compensations given to the "monitoring agents".

The situation of the bargain costs and the „golden parachute"

In SOE's, the compensations take the form of a monthly payment, "bonuses" "premiums". If these payments are not connected to performance indicators or this connection is unclear, the contractual approach is not based on optimality. These compensations are neither paid as a means of risk diminishing (as it happens in the private companies), nor correlated with the performance of the SOE or set in accordance with the agent's skills, because the latter was arbitrarily selected.

Actually, on each power shift occurs a quite significant fluctuation in the designation of agents – company managers and of "monitoring agents" although formally they are selected on a competitive basis. The instability of the agent's position within the SOE encourages him to extract the highest possible rent on a short term.

This opportunistic behaviour is also triggered by the fact that after his appointment in the company the agent can realize that the initially estimated rent value is below the cost incurred in order to compete for the position of agent.

At the same time, there is a situation where the agent seeks an alternative income source and, in order to extract a rent, he will therefore exploit any transaction made by the company.

Consequently, the State companies choose two "compensation" types : some of them are granted depending on the results so that we can name them "bonuses / premiums", while others are severence payments. In the latter case, the "compensation" is similar to a "golden parachute".

Residual loss

Under the conventional model (Jensen and Meckling), the residual loss is included in the structure of the agency costs and represents the loss of the firm's value when the principal reduces his ownership rights. In other words, it appears to be an opportunity loss because, if the principal disposes of a part of his shares, he would not have any agency cost, as he is also an agent.

Actually, the "residual loss" is a risk, namely a potential loss which, under certain circumstances, can turn into a certain loss due to management errors or possibly even to bad faith. SOE's in Romania do not anticipate this risk. Therefore we should ask why? One explanation would be that the principal and the agent do not have residual rights in the SOE which would result from the payment of the dividend. However, the agent receives a performance bonus that I can consider a residual right. The principal, in his capacity as political decision-maker, can have no residual rights. He has only an informal decision power within the SOE.

Rent extraction from the SOE's inputs

The agent has an advantage over the principal in terms of the input and the output values of the SOE. The agent is aware of all the SOE's transactions draws up both the production and the financial plan taking into account the two agency contracts (the informal T1 and the formal T2).

The principal has a probabilistic estimate of the costs / input value of the production. Even if he had accurate information, the principal would face an information gap compared to the agent, because the input prices do not remain constant. Consequently, there will be permanent asymmetric information in the relationship between the principal and the agent, irrespective of the fact that they belong to the same social network and share the same interests concluded in the T1 agency contract. Besides, the decisions made by the principal are not influenced solely by his utility, but also by a political context or by a political interest emerging irrespective of his own will (i.e. the level of the regulated tariffs on public utilities). This brings about factors that change the arrangements provided in T1 for the principal and for the agent as well.

At the same time, in order for both parties to maximize their utility (to the detriment of the SOE), the agent will assume all the risks, while the principal remains neutral. This imbalance in terms of risk sharing in the context of an information asymmetry motivates the agent to hide from the principal his activities with a view to extracting a rent only for himself. This rent extraction can be identified by verifying the optimum ratio between the inputs and the outputs, namely by measuring the technological and economic efficiency.

3. Conclusions

The reason for which an actor enters a game in order to extract a rent from a SOE is the cost, which is lower in the presence of captive institutions than the cost likely to be incurred by the same person within a competitive institutional environment where his effort should be greater in order to obtain a productive income. Therefore, the main causes of the distorted relationship between the agent and the principal are the diffuse nature of the ownership rights in the SOE, as well as the existence of other captive institutions, the existing monopolies and the rules on tariffs and licensing, all of them giving a negative incentive to the principal (the policy decision-maker) and to the agent as well. Eventually, the rent extraction leads to a certain configuration of the corporate governance model which, although formally it is identical to any other model of a private company, actually it functions differently and with other costs.

Another cause of rent extraction is that the state keeps firms producing rival goods, and a combination between public services with business. A diminishing rent competition and extraction occurs whenever the deregulation is non-selective and the State cannot keep under control the rival-goods suppliers.

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