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## "Institutional Background on Employee-Employers Negotiations"

In the modern economic structures of societies there are examples where fundamental assumptions of rationality are breached and the outcomes cannot be easily explained by the neoclassical economic theory. The attempt to handle inflationary pressures generated by income policies can be seen as such an example. Better results that lead to lower inflationary pressures are tightly associated with the capability of the 'economic setting' to cope with the prisoners' dilemma trap that arises during the wage bargaining process. Instrumental behaviour following rational choice principles cannot be mobilized in order to explain how an economy can overcome the prisoners' dilemma and avoid inferior outcomes.

According to rational behaviour the outcome of a wage bargaining process could take the form of a Nash equilibrium that provides an inferior outcome compared with the one that could be achieved under cooperative strategies among the negotiators. However, in some countries there is a tendency to overcome this problem and achieve better outcomes that foster trust and cooperation between the two parties that negotiate (Unions and Employers association).

The aim of this paper is to introduce a novel approach on why there might be different results in the wage-bargaining processes among countries. Further suggestions on how we can improve the outcomes of each country that is facing difficulties to tame their inflationary pressures can be made by creating the right conditions in order to promote trust between employers and employees.

We will argue that different institutional settings, which accommodate different social norms, lead to different results among countries. Some of these settings facilitate win-win solutions and lead to Pareto optimum results that outperform the result prescribed by game theory.

In addition, it is worth mentioning that the negotiations between employers and unions can be seen as an example of variable sum game. Both might win and both might lose from the pursuit of particular strategies (Carlin and Soskice, 1990). As in the case of trade it is better for nations to cooperate and trade than to seek autarky. In the same token we argue that cooperation in the game can bring valuable gains to both the participants and end up with win-win solutions. From the different approaches that exist on the empirical literature about the impact of the Trade Unions on the surplus produced from the cooperative behaviour among firms and Unions, I choose to conscribe the one that argues that the unions' cooperation is a decisive feature in order to increase the surplus produced by the firm (Booth 1995). Therefore, in our research we will consider that Unions (employees) can facilitate productivity and increase the surplus produced so their cooperation is a vital part for their employers.

A plausible explanation for the above-mentioned ability of some economies to overcome this problem might be the following. The subjective probabilities the negotiators assign to the different outcomes of a payoff matrix, that represents the result of the negotiations, might differ, according to the different economic institutional frameworks in which the negotiations take place. Focusing on the wage bargaining processes of several countries within the European Union we try to explain why there might be a different tendency on the subjective probabilities that the negotiators assign to the final outcomes that might derive in each of those countries. These different probabilities can be seen as a consequence of the distinct institutional economic structures, in each country, that foster different path dependence of economic growth and produce various levels of trust.

2<br/>1Non-cooperativeCooperativeNon-<br/>cooperative1P114P20Cooperative1P114P20

**P3** 

This notion can be better shown in the following matrix.

0

Each cell can be seen as a possible outcome of the negotiation process. The game has the form of a Prisoner's Dilemma. These four different outcomes might be expected by each negotiator, under different exogenous institutional settings, with different probabilities. Before entering a wage bargaining process, a negotiator, like any human, will have a subjective belief about the distributions of probabilities for all these four events (P1, P2, P3, and P4).

4

3

P4

3

In this matrix that depicts a hypothetical "country" the game theoretic approach we would stack in inferior outcome for the income policy. Many theorists argue that political and social structures could and distort rational economic outcome and achieve a better result that will generate a win-win outcome.

Taking into account the above, and assuming that both players are stuck in an inefficient Nash equilibrium, we reconsider the ideas of Leibenstein (1982) and Broome (1989) in order to provide our plausible explanation how both players can avoid ending in an inefficient Pareto equilibrium.

According to Leibestein (1982) the perception of the value of the payoffs in each cell for each person might change under different institutional settings. Consequently, we can argue that the payoffs in the matrix can be altered through an institutional design to avoid the occurrence of Pareto inefficient outcomes.

Broome (1989) argues that 'we cannot plausibly assume, though, that everyone will make the same assessment of the probability of every event in a payoff matrix' (p. 07). Taking this idea further we can assume that different negotiators may assign different probabilities on outcomes-cells of the matrix even when they have agreed prior to these potential outcomes. Therefore, certain combinations of probabilities may lead to a Nash equilibrium that is not a Pareto one, when both negotiators choose a strategy according to the expected utility that is generated. Nevertheless, it must be addressed that as Aoki (2007) defines stable institutions, all players have a shared map of common beliefs how the game will be played. However, we argue that the difference in these beliefs is something that our research has to highlight in order to give a further explanation from where better outcome might be generated.

By combining the preceded argument of Leibenstein and re-formulating Broome's analysis we could suggest a set of variables that will show how the institutional framework within which negotiations processes take place, could help to overcome the Prisoner's Dilemma.

Therefore the problem to explain why there is this a difference in the outcomes between various countries arises and it is very crucial under the scope of fiscal austerity that is promoted by the mandates of the European Monetary Union. It is essential to unravel the mystery of this difference, in order to be able to proceed in the further step that will help us to succeed getting more prudent economic results even in countries that lack tradition in promoting wage restraint.

Moreover, in our analysis we draw elements from institutionalism in order capture the impact of the economic setting in negotiations. Institutions are generally seen as the "rules of the game" or the "humanly devised constraints that shape human interaction" (North, 1990; p.3). New institutionalism that describes the relation between institutions and actor's preference is divided into different branches. These differences may derive from different templates that exist in the society. Moreover, it can be seen as a reaction to atomistic accounts of political behaviour and asocial accounts of the context in which behaviour occurs (Di Maggio & Powel, 1991; p.5). Therefore it is quite important to incorporate the institutional aspect in a set of plausible variables that would be used in order to predict the outcome of the process.

Another important dimension analysing the different probabilities that might be assigned to the outcomes of a matrix is the informal constraints that might prevail in the society. The key role of informal constraints can be seen in many examples of real life. When the same formal rules or constitutions are imposed on different societies they produce different outcomes. As Axelrod (1986) illustrates in his work social norms impose or dictate the choice, not the formal rules. Moreover, North (1990) argues that 'cultural filter provides continuity so that the informal solution to exchange problems in the past carries over into the present and makes those informal constraints important sources of continuity in long-run societal change' (p. 37).

Sudgen's (1986) "morality of cooperation" follows a similar mentality. He argues that a convention acquires moral force when almost everyone in the community follows it, and it is on the interest of the people in the society to follow these rules. Thus, conventions as norms can be seen to follow cultural orientation. In the importance of self-imposed codes lies the explanation that subjective perceptions are affecting choices. As long as formal institutions allow individuals to express their preferences in ideology or altruism, subjective preferences have a more important role in determining the outcome of a choice.

As a result, informal constraints together with the formal rules, both of them constituting the institutional setting, can influence the motivation and the deciphering of the individual when making choices or predictions. The opportunity set in which the agent is called to take decision is manipulated by this framework. Therefore there is no doubt that the argument we support of the existence of different probabilities in the outcomes of the matrix can be explained by the unique institutional setting that exists in different societies.

According to Lovallo and Kahneman 2003, people breach rationality by taking arbitrary focal points. These arbitrary focal points I argue may be generated by institutional arrangements that foster relations that are based on grounds way other than that which promote economic efficiency. Historical institutionalism

addresses that existing institutions may reproduce inefficient outcomes into a society, which are on policy legacies. These legacies may create arbitrary focus points that may work as wrong benchmarks that people might use at negotiations or wage bargaining processes.

I have worked on the developed of a rule-based system that in the hands of an expert would help us identify the space of possible outcomes in bilateral wage negotiations. The System incorporates different variables that are divided into three categories (Economic Indices, Relative Relations and Institutional Setting) and its aim is to capture the probabilities that a Negotiator would assign in a negotiation process that takes the form of Prisoners' Dilemma.

In order to check the validity of the Decision Support System I work upon in the case study of IG Metal trade union-management bargaining that took place in the year 2012. The results are very promising and further research in order to generalize the model should be made.

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