

Covid Congressional Inquiry and Game Theory

A binary solution: brilliant strategy or extreme stupidity?

Mario Cezar Silva Serpa¹

It is not at all absurd to compare the Covid Congressional Inquiry (**CPI** in Portuguese) to a game. After all, not few people think that the committee's noblest objectives are in the background, and what really matters is its politicization. In this sense, it remains to be seen whether the CPI will be a cooperative or non-cooperative game, according to the interests of the "players"; on the one hand, the government and its allies and, on the other, the majority of the CPI. Economists have helped us a lot in this area with Game Theory, a structure to model scenarios in which there are conflicts of interest between players, who try to mutually predict their decisions in a sequence of actions and reactions.

Rational choices seem to direct our attitudes so that the results always suit us best. Mathematician John Nash proposed what is known as Nash Equilibrium in a competitive game, wherein no player has any incentive to change his strategy after evaluating her opponent's choice. On the other hand, in a cooperative game, the solution to the problem involves an unbiased (generally unfair) distribution of losses and gains from the players involved, that is, in the view of economist Lloyd Shapley, a coalition. From this cooperation rises the Shapley Value concept, which states that each player will enjoy a better payoff than if they were acting in isolation. Thus, for the first case, Game Theory presents us as being intelligent and, for the second, as being fair.

The Covid CPI was launched on 27th of April and even before that, the government set up a team to face it and, curiously, "leaked" a document with the main points of possible attacks on the government. This act has led to criticism by both the situation and opposition, to a greater or lesser extent, but always in the same direction, ranging from an "amateur" attitude to "shooting oneself in the foot", respectively. Perhaps this is not quite so and here is another assessment. The hypothesis that the government knows very well what it has done (facts abound) and this may leave it in trouble, may suggest that it does not want a competitive game, quite the opposite. But, how to do that while in the spotlight and under severe political unrest? Subtly and

subconsciously, it aims to suggest to the committee, gradually and constantly, the goals the inquiry must achieve as appropriate and fair. Does it underestimate the opposition's intelligence? No, it is just an indirect process of persuasion producing mutual benefits, while considering that relevant games in real life involve successive moves, including some apparently counterintuitive.

It is common currency that everyone knows how a CPI starts, but never knows how it ends. It seems clear that one outcome is likely to be moving forward with the impeachment of the President. The Commander-in-Chief certainly does not want this, but the opposition, notably the PT, does not seem to want it either! However, the CPI can "get out of control" and the result will invariably lead to this result – everyone loses. The impeachment of the President immediately brings the Vice-President into office, and this is beyond an unknown, for he can be the third way or a bridge to the latter, while hindering the opposition's ambition for 2022. It seems a more fruitful choice to leave the current president "bleeding" until then, and deliver a massive victory over him. On the other hand, in a cooperative game, the government saves time and gathers strength to entail some reaction.

Thus, in this game it seems that the government should not even flirt with attempting to establish a Nash Equilibrium (disregard the initial appearances, attacks and exaggerations), but truly find a Shapley Value. In this case, it would be smart and fair, but the price of the Centrão would go up a lot. However, it is not easy to admit the existence of these two qualities in the team in charge of conducting the Covid CPI process in the government. Perhaps the leakage of the list of 23 topics was quite simply an extreme stupidity. Simply that; neither more nor less. In this line of reasoning and for those who do not want the current administration to be polarized and the possible return of left-wing leaders to power, the opinions tend to wish that each player, with their hubris and arrogance, continues to play independently and austere.

May both parties proceed in an attempt to obtain the best result for themselves. Brazil appreciates it.

¹Mario Serpa is an Economist and Partner at Redwood Asset Management.