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Negotiation Games in the Fight against Corruption

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Edmond J. Safra Working Papers, No. 46
<http://www.ethics.harvard.edu/lab>

June 19, 2014

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by Mariano Mosquera

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Abstract

Game theory has allowed the study of the rationality of relationships among actors. This is a strategic relationship where the final outcome depends on the decisions made by each actor. As each player awaits the other player's decision, the anticipation of the opponent's move is essential. For game analysis, it is important to view such anticipation as a combination of expectations. When it comes to a negotiation game, the various rules of the game, the means that condition players' moves and the projection of goals are also important. Likewise, corruption can be also analyzed as an agreement that is reached after a process of negotiation between actors. The objective of this paper is, therefore, to interpret Schelling's negotiation games as adapted to the problem of corruption.

Five situations are addressed. The first game describes a win-win outcome, as a classic game to reach a corrupt agreement. However, the existence of a number of requirements (based on trust and secrecy) on which an anti-corruption policy could take action is shown. The second and third games introduce the concept of simultaneous games and, in particular, the relation between asymmetrical benefits and risks of corruption for two actors, one that offers the corrupt practice and another that accepts such practice. These simultaneous games include details about the strategies of each actor and, on the other hand, the anti-corruption strategies available for the state, which are based on altering the players' strategies. The fourth game describes a situation of victimization of corruption. This game focuses on examining how it is possible to withstand corruption through negotiation strategies. Finally, the fifth game introduces the state as one of the actors in the negotiation. This game describes a two-fold negotiation strategy that the state must develop to discourage a corrupt actor.

Keywords:

Negotiation, Corruption, Strategy, Gaming, Institutional Corruption, Anti-Corruption Strategy

Introduction

Game theory constitutes a major step forward in the study of human behavior. Unlike decision theory, where only an actor, a set of alternatives, and a valuation criterion enable the identification of the rationality of the behavior, game theory introduces the strategic dimension among actors. This entails going from an individual rationality analysis to the study of a rationality of anticipation among players, with a payoff system whose final outcome depends on the decisions of both players.

Within this framework, negotiation stands as a particular form of game. It involves the ability to anticipate, and the final outcome (generally in the form of an agreement) depends on the strategy developed by each player/negotiator. Negotiation also involves some matters of particular interest for the analysis of corruption, such as means of communication and persuasion among actors and, in general, the rules of the negotiation process that lead (or do not lead) to a corrupt pact.

The paper explores the logic of negotiation from a conceptual, abstract perspective. This enables the discovery of the performance of strategies that otherwise appear as inaccessible and implicit. Revealing anticipations, payoff systems, use of available media, and how the actors project their objectives over time, brings an added value to the design of actions against corruption.

Schelling's Negotiation and Corruption

Negotiation is a strategic game based on expectations.¹ Each actor interprets the opponent and, in this way, seeks to anticipate the other player's move in order to make his own decision. The final outcome depends on both players' decisions. In this sense, the combination of expectations is essential to reaching an agreement.

In this particular case, we do not want the agreement to be reached. On the contrary, we will try to determine which conditions are needed so that a corrupt negotiation reaches stalemate and, finally, the pact is not realized. Stalemate equals success in this use case, which focuses on fighting corruption.

¹ Thomas C. Schelling, *The Strategy of Conflict* (Harvard University Press, 1960).

Corruption may be defined, in this case, as the action and effect of giving or receiving an object of value in order to get someone to do something (or to stop doing something) to circumvent a formal or implicit rule about what has to be done, for the benefit of the person who gives such object of value or for the benefit of a third party.²

This is the definition that, although more restrictive than others, will be useful to understanding the relationship between negotiation and corruption. This type of corruption has four main features:

- Interaction: It always takes place between two or more actors (one actor that gives and another actor that receives an object of value, if we consider only two players) in the form of an agreement that both players visualize as having a win-win outcome. This can happen between actors from the public sector, between actors from the private sector or between actors from the public and private sectors.
- Abuse of power: Authority is used for personal benefit. There is always some degree of discretion for someone who has a certain monopoly of power in an organization.
- Violation of rules (formal or informal): These could be well-specified and explicit rules, or it could be a violation of the organizational culture in a public or private institution.
- Secrecy: The pact is kept hidden and an effort is made to conceal the advantages achieved through the exchange.

In the case of corruption, it has always been thought that actors reach an agreement because both of them clearly expect to win. In other words, a negotiation that will have a win-win outcome for both players. Our first game focuses on this win-win perspective, and on some requirements that are implicit and that weaken this perspective. Also, simultaneous games will show that this win-win outcome perspective in corrupt agreements can be revised if we introduce an asymmetrical interaction process (1).

On the other hand, either only one of the actors or both players of the corruption game can abuse their power. Moreover, the degree of discretion can be present in public and private organizations (2).

² ESADE, "Buenas Prácticas en la Lucha contra la Corrupción," Blog del Instituto de Innovación Social, February 12, 2012.

For players of this game, the violation of explicit rules is a clearer condition to define a situation of corruption, whereas the violation of implicit rules determines specific situations against the ethics of an organization. In our games, the existence of explicit rules, or their absence, is a powerful tool of persuasion in the negotiation process (3).

Secrecy is another key aspect of the negotiation of corruption. Some elements of traditional negotiation, such as the publicity of a decision, cannot be used in the specific case of corruption. In classic negotiation processes, an actor can put pressure on an opponent by disclosing a decision, which shows the pressured actor that the decision will be irrevocable. This strategy is effective because it involves commitment to a third party, the public in this case. As corruption is the result of a secret negotiation, publicity is not possible.

It is also common for an agreement to include two clauses that are not possible in a corrupt agreement: the right to sue and the right to be sued. It is unlikely that such guarantees can be given in a secret agreement (between two parties), since there is no neutral third party to settle a conflict—unless the third party is involved in the secret. However, enlarging the circle of actors who are aware of the secret makes it less of a secret. Trust and secrecy are the core of corrupt pacts; these conditions annul the right to sue and the right to be sued as well as the fear of a third party, such as the law of the state (4).

Games

The various situations of a negotiation can be illustrated with a game in which two actors have to choose between two poles of an alternative. In the first game, we will call them player I and player II. Player I can choose between A or α and player II can choose between B or β .

Both players' gain depends on the choices they both make. For this reason, each player's decision depends on the strategic anticipation of the other player's move. The four possible combinations (AB, A β , α B, $\alpha\beta$) produce gains or losses for player I and player II. We represent Schelling's games with a coordinate graph, where the gain of player I is measured vertically and the gain of player II is measured horizontally.

The final outcome depends not only on the payoff system (location of the points on the plane),³ but also on the rules of the game. These are rules about the availability of means of communication and commitment, order of moves, or whether many simultaneous games can be played, among other conditions.

The multiple variations of the game depend on what each player guesses about the value of the payoffs for the other player, and on what each player guesses about what the other player guesses about himself. However, they also depend on the starting point and the means available to execute a certain strategy. Moreover, the expected time frame to obtain gains should be added to these variations.

The unifying principle is that the commitment of every actor in a negotiation depends on four components: ability to anticipate (1), knowledge of the initial payoff system (2), available means and rules for the use of means (3) and, finally, temporal projection of goals (4).

Commitment Components
Anticipation (1)
Knowledge of the system (2)
Available means and rules (3)
Projection of goals (4)

Based on these four components, an actor defines his strategy to bind himself to actions or abstentions, which are materialized as promises or threats.

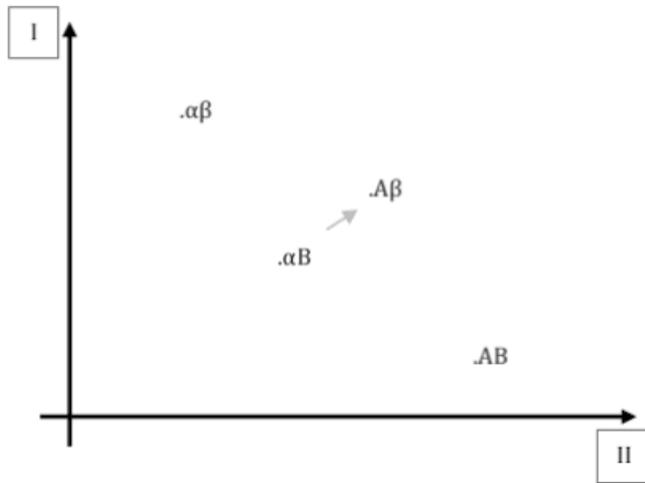
As can be seen, we have added here the time element, which is very important.

Temporal projection is also a means (3). Current decisions are made in order to achieve current outcomes, but if there is a future projection, this conditions present decisions. In other words, the existence or non-existence of new games may strengthen or weaken current strategies.

³ The initial payoff system is based on Schelling's various hypotheses. It is understood that reality can be adapted to these initial payoff systems for the corresponding analysis of the concrete processes of negotiation of corruption.

However, the purpose of a strategy may be to create new games (4). The projection of goals can be immediate, in order to gain immediate benefits, or it can be future-oriented, in order to gain greater benefits at iterated games. At iterated games, the same players will interact with each other.⁴

Game 1: Win-Win



In this game $.\alpha B$ represents the minimum point (status quo) that any player can achieve by himself. However, both players would prefer $.A\beta$. Both players win at this new point, which can be visualized as a win-win outcome for the players. The main issue here is that in order to reach this new point of higher gain for both players, they must trust each other and be able to make credible promises.

In this game, no matter who moves first, the other player has an incentive to cheat. If player I chooses A first, player II can choose $.AB$. If player II chooses β first, player I can choose $.\alpha\beta$. In this game, at least one player must be able to commit himself to abstention, so that the other player can move first. It is vital that one player's promise of abstention is believed by the other one, so that the latter dares to move first.

In iterated games, this situation can be alternated, and whoever moves first now will move second in a subsequent game. In the case of iterated games, any present commitment to

⁴ Iterated games require different conditions, especially memory. Memory determines the strategy of conditional cooperation. The perspectives of stability in the interaction can strengthen certain commitments, whether made as promises or threats.

abstention is strengthened, since in a new game it is possible to punish the player who cheated in the present game.

If the win-win game is a unique game, the commitment to abstention requires greater efforts at credibility.

It is important to mention that creating an iterated game may be the goal in this case, and that the commitment to abstention is based on the idea of trying to sustain the interaction over time in order to achieve sustainable benefits.

This game format is important for the study of corruption because it shows that win-win games have implicit requirements, such as trust between players so that the promise (that there will be no cheating if the other player moves first) is effective. This is also decisive in a game where the right to sue is null and void.

But what would happen if trust among players could be prevented? That is, if it is possible to introduce some element that affects, for instance, the players' reputation.⁵ A strategy that affects the relationship among players is very different from a strategy of intimidation from an external actor, such as the laws of the state.

In fact, in corrupt agreements, the loser can be an external actor such as the state, whereas both players in the negotiation win. This means that there is no incentive, under conditions of trust and secrecy, to fear an external actor. The key is to affect the relationship between the parties to the agreement.

Simultaneous Games

The expectation that the actors have about a win-win outcome in a corrupt agreement is not exact. While it is true that there can be more benefit to both players if there is an agreement than if there is no agreement at all, this also happens in negotiations with distributional features.

Therefore, the negotiation of corruption, based on asymmetrical information between the party offering the deal (offeror) and the party accepting the deal (acceptor), in fact, has an

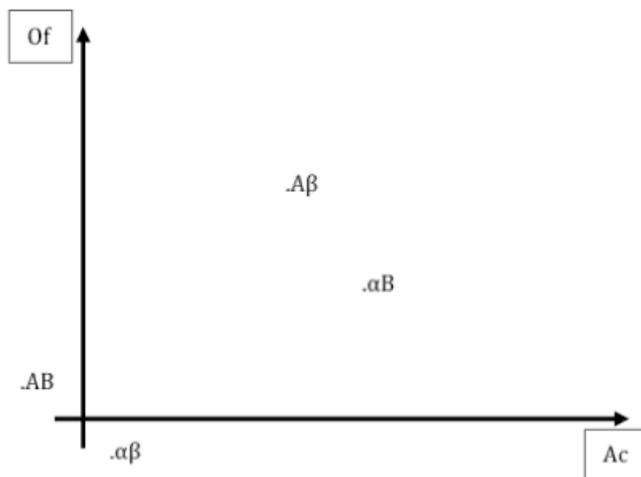
⁵ Reputation can be a memory experience at iterated games, with the same players. If the experience includes other actors, it is necessary to implement communication or information strategies to disclose or to know the historical path as a reputation.

unequal distribution of benefits and risks. There is always a certain asymmetry in information, which generally favors the offeror, since he is the one who knows the process of corruption that is being offered.

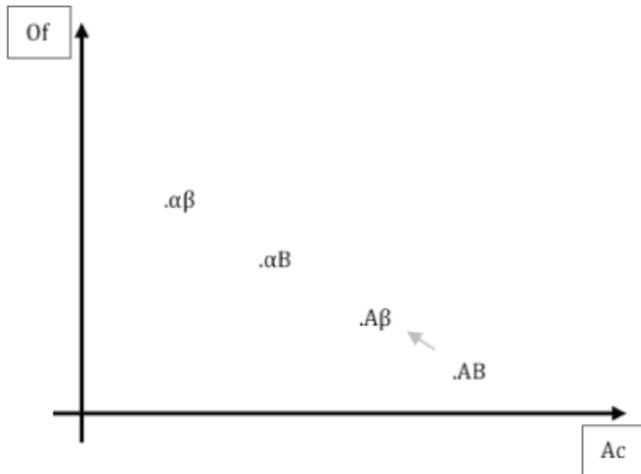
In this sense, the acceptor may be tempted to add the expectation of risks to the expectation of benefits. In other words, seeking gains with risks is less attractive than seeking gains with no risks. The risk is related simply to the fact that the acceptor has less knowledge about the corrupt process. A risky situation makes a corrupt agreement less attractive for the acceptor. This issue, if anticipated by the acceptor, could prevent the agreement itself. A corrupt agreement can often be explained by the acceptor's ignorance.

Unlike game 1, where it is possible to achieve a win-win outcome, game 2 introduces asymmetrical benefits. This is the first transformation that should occur. This transformation is possible if conditions of inequality among actors are perceived, even if there are not yet signs of a risk of corruption. Then a second transformation that should occur is the passage from the perception of asymmetry in benefits to the awareness of asymmetry in information among actors. Finally, the third transformation involves the inclusion of risks (game 3) to play in simultaneous games. The asymmetry in benefits alone does not discourage the corrupt agreement. Awareness of the asymmetry in information is an important link to detect signs of risks.

Game 2: Asymmetrical Benefits



Game 3: Risk



Game 2's two possible outcomes are $.A\beta$ or $.\alpha B$. $.AB$ and $.\alpha\beta$ should be interpreted as equivalent to "no sale" in a negotiation. In other words, negotiation reaches stalemate and there is no agreement.⁶ In game 2, the player that decides first wins. If player I (offeror, Of) chooses A, he leaves only choices $.A\beta$ or $.AB$ for player II (acceptor, Ac). Clearly, the acceptor will choose $.A\beta$. The reverse is also true. If the acceptor commits first to B, the offeror only has choices $.\alpha B$ or $.AB$ to choose from and finally chooses $.\alpha B$. In this game, the first to move wins.

The ability to constrain an opponent always depends on the ability to bind oneself. It is a case of convincing the other player that the decision is irrevocable. In game 2, this means convincing the other player that the first movement is final and will not be revised. In a corrupt process, the offeror makes the first move; the winning outcome, if we consider game 2 in isolation, is $.A\beta$.

The game changes considerably if another game is introduced, such as in game 3. These are, actually, two simultaneous games, the asymmetrical benefit game (game 2) and the risk game (game 3). For this reason, the coordinate graph of game 3 measures risk in the vertical axis and in the horizontal axis.⁷ In game 3 the status quo outcome is $.AB$. However, the acceptor

⁶ Thus, Schelling's initial payoff system is useful to show the asymmetry between offeror and acceptor in corruption practices.

⁷ The costs are assessed as a risk before making the decision. The risk is, hence, a "cost risk," which is defined as the consequence in the costs based on the likelihood of occurrence. However, in this case, risks appear in an unclear interaction with benefits, since they are in different measurement units. The fact for which the actor cannot possibly

can make a threat. Let us imagine that the acceptor threatens to commit to β in game 3 unless the offeror accepts B in game 2. In game 3, switching from .AB to .A β entails more risks for the offeror and fewer risks for the acceptor. This could happen due to an acceptor's request for a change in the corruption game rules. However, the acceptor is willing to take high risks if benefits increase. If the threat is effective, the acceptor does not lose anything in game 3 and wins in game 2. Binding oneself by threatening a decision should have two features: it should be possible to communicate convincingly to the other actor and it should seem irrevocable for the offeror.

The offeror will attempt to play the game only in the field of benefits, while it is vital that the acceptor makes moves in the field of risks.

The Actors' Strategies: Communication and Timing

There are different strategies that can be implemented by the offeror and the acceptor. The most relevant ones refer to conditions or types of communication and persuasion, and to the timing of the implementation of strategies.

For example, lack of communication may be a strategy used by the offeror. In other words, the offeror makes a decision in game 2 and prevents any communication with the acceptor in order to avoid the threat.

On the other hand, violation of explicit rules is always a greater incentive for the acceptor to hesitate about his own risks. On the contrary, when rules are not clear, the offeror may take advantage of this to persuade the acceptor that the corrupt agreement involves no risks.

In this case, the abuse of power may be more evident in the offeror's side, since the offeror is the one offering certain discretion that is available to him; for example, a public official who is able to alter a public bidding process. However, the acceptor may be also abusing his power in his own organization; for example, a businessman who alters a corporate balance sheet to facilitate the payment of a bribe. But if the offeror communicates clearly that the abuse of power is exclusive in his context, this could be useful in persuading the acceptor.

make a rational calculation (benefit minus cost) is inherent in the existence of two separate games, although related as simultaneous games.

Another main issue is the timing of the negotiation. This is a key factor to reach stalemate in a corrupt negotiation. If the offeror makes a decision in game 2 and then the acceptor makes the threat, the agreement will hardly be reached, since the offeror already committed to his decision in game 2 and should give in during game 3. The acceptor's threat strategy may only succeed if it is made before the offeror's decision in game 2.

The offeror's first movement in game 2 is positive for him only if game 2 is a unique game (as is often the case in corrupt agreements).

Anti-Corruption Strategies

In our case, from an anti-corruption perspective, the acceptor's threat in a simultaneous game is expected to be untimely (after the offeror's move in game 2), but it is expected to be made and not to be intimidating enough for the offeror (the offeror does not give in due to his position of power).

In short, if the acceptor identifies possible risks and is resolved to negotiate in that field, the negotiation can reach stalemate. Stalemate results from both parties becoming committed to incompatible positions. The offeror will not give in during game 2 and will not give in with regards to the distribution of risks (in fact, he cannot accept the field of game 3). The acceptor will not abandon his conditional threat, which includes games 2 and 3.

The main problem is that corrupt pacts are usually made in the field of benefits, without any anticipation about the risks by the acceptor. The trust towards the offeror usually cancels the possibility of anticipation by the acceptor.

The key, again, regarding anti-corruption policies, is introducing distrust among players. For example, by destroying the offeror's reputation, disclosing that the offeror does not know what he is doing in an imperfect context for corruption.

It will be necessary that the acceptor understands that he cannot know the corrupt process as the offeror does, or that the offeror will never be able⁸ to communicate the process to the acceptor with precision (if the offeror's strategy consists of explaining the corrupt process in

⁸ Either intentionally or because corruption is an informal process.

order to persuade the acceptor). Therefore, the awareness of asymmetry⁹ plus signs of risks is the formula to fight corruption.

As an example we can mention that many governments use the “black lists” methodology. With this tool, governments publicly disclose a list of companies that have been punished for defrauding the state; for instance, in bidding processes. This helps governments to avoid signing contracts (or allows the government to take greater precautions) with companies included on black lists. This has been considered as a way to protect the “state’s moral principles” from the threat of corruption. However, we believe this should be viewed from another perspective. In particular, it should be viewed as a way to sully the reputation of such a company if it wants to offer a bribe to a public official in a new contracting process. This can be achieved because if the company had already been punished, it clearly does not know very well what is doing, and cannot offer any guarantees of low risk in corrupt processes. The goal is to breed distrust among corrupt actors from a pragmatic perspective.

It would be important to also disclose corrupt public officials and companies that have defrauded other companies in order to deter corruption among private parties. Moreover, this perspective only punishes actors who attempt to repeat their corrupt behavior, but it does not affect their rehabilitation.

⁹ As can be seen, there is a need for a transformation from the identification of the asymmetry in benefits to the awareness of the asymmetry in information.

Comparative Table of Strategies

The offeror's various strategies in simultaneous games can be summarized in a table that includes information about the outcome expected by the offeror and the outcome expected in the fight against corruption. Each offeror's strategy can be altered by a public policy in certain institutional conditions, hence the value of its clarification.

Offeror's strategies	Expected outcome	
	By the offeror	Anti-corruption
Reputation	The acceptor is confident that the offeror "knows what he is doing" and, therefore, that there are no risks in the corrupt process.	The acceptor hesitates due to various "signs" about the offeror's ability to carry out a corrupt process.
Exclusive abuse of power	The acceptor is confident that the offeror is the only one that acts discretionally in his organization.	The acceptor recognizes that he also acts with abuse of discretionary power in his organization.
Protection	The acceptor is confident that the offeror can protect him.	The acceptor determines that the offeror cannot protect him in his risk environment.
Lack of communication	The offeror avoids the acceptor's threat.	The acceptor succeeds in threatening the offeror, but he does it in an untimely and ineffective manner.
Broken down promise	The offeror's promise may be broken down into a series of consecutive smaller promises. In this way the offeror demonstrates that he will abide by his decisions and will create a tradition of trust.	The acceptor identifies the whole offer and the overall risks, even as the sum of partial risks.
Threat of exclusion	The acceptor is confident that, if negotiation reaches stalemate, he will be excluded forever, since there is a long line of potential acceptors waiting for an offer from the offeror.	The acceptor does not consider that his decision equals self-exclusion.
Future trust	The acceptor is confident that the offeror would not jeopardize future opportunities with a risky process.	The acceptor identifies current risks and does not sacrifice them for the future.

The acceptor's various strategies in simultaneous games can be summarized in a table that includes information about the outcome expected by the acceptor and the outcome expected

in the fight against corruption. Each acceptor's strategy can be altered by public policy in certain institutional conditions, hence the value of its clarification.

Acceptor's strategies	Expected outcome	
	By the acceptor	Anti-corruption
Sign identification	The acceptor identifies signs of the process that allow him to threaten and strengthen his position with the offeror.	Signs allow the acceptor to make a threat and, therefore, there is no agreement.
Communicated threat	The acceptor's threat succeeds and reduces his risks or makes the benefit more attractive.	The threat is untimely and not intimidating for the offeror.
Broken down threat	The threat may be broken down into a series of consecutive smaller threats. In this way the acceptor demonstrates that he will abide by his decisions and forces the offeror to give in.	Smaller threats are not intimidating for the offeror.
Image of future strength	The threat enables future negotiations with the same offeror in a situation of more strength.	The projection of the acceptor's image of strength repulses the offeror.

Institutional conditions and public policies (which stem from such conditions) are essential to achieve the expected anti-corruption outcomes by altering the strategies of both the offeror and the acceptor.

Altering the offeror's strategies implies, first, sully the offeror's reputation by demonstrating that entering into an agreement with him is risky. Formal position and informal power in an organization may indicate a low span of discretion. Also, political opposition in the organization may indicate potential risks. Moreover, the features of the accountability mechanisms the offeror is obliged to comply with indicate other risks. In other words, it is not enough that these conditions actually exist in the offeror's organization; the important thing is that they are known by the acceptor. These conditions should not only act as a deterrent for the offeror; they should be, above all, signs of risk for the acceptor. This is the key.

On the other hand, the state may create disclosure mechanisms so that the acceptor can recognize that in his organization and his environment there are risks as well, and that such risks are exclusively related to him. These risks may be very distant from the offeror's ties of

influence. For example, this is the case with rules that severely punish the private sector for the offer of bribes to the public sector.¹⁰

The acceptor should also recognize two temporal dimensions: that risks are current and that withstanding corruption does not imply future exclusion in a broader context. The state may also implement strategies to persuade actors about this. Moreover, the state should contribute to the creation of the broader context.

It is important that the state introduces signs of risk to breed distrust among actors. Then, when the threat is made after the offer, the threat will not succeed. Moreover, the actor with the greatest power in this relationship is the offeror, which means the acceptor's threat will never be intimidating enough.

Allais Paradox Function

Let us take the analysis one step further by introducing some important references using the Allais paradox.

The Allais paradox shows that any actor, in general, avoids risks. If an actor has a risk choice and a non-risk choice, he will choose the latter. This happens even if the risk choice has more benefits.

Now, the paradox arises when both choices have different risks (but both have, or actually "seem to have," risk). In this situation the actor is willing to risk a little bit more and choose the higher risk choice to get more benefits.

The Allais paradox plays a key function in our game since it works as compensation. The acceptor may want his risk to be compensated with greater benefits in game 2. In other words, if the acceptor identifies that he is already in a risk situation, he allows himself to risk a little bit more and to introduce a threat to get more benefits. This is key to our game since the paradox enables us to state that the mere identification of apparent risks allows the acceptor to make the threat.

This entails a more complex analysis and the understanding that the communication and persuasion strategies already mentioned influence the choice offered by the offeror ($.A\beta$). On

¹⁰ Rules that are exclusively centered on the public sector do not act as a deterrent for corruption in the private sector. Well-specified anti-corruption rules for the private sector are generally effective.

the other hand, it is clear that such strategies do not influence the choice that is not offered ($.\alpha B$).

If we consider game 2 alone, the choice offered by the offeror is the non-risk choice ($.A\beta$). This is so because all the offeror's strategies of persuasion influence (if we assume that they do it successfully) this choice.

For this reason, this offered choice is never discussed by the acceptor, since the other choice with more benefits to the acceptor ($.\alpha B$) could bear some risk. This is so because the offeror's strategies of persuasion do not influence this choice enough such that it is not offered (but it is available). Between a risk choice and a non-risk choice, an actor will choose the latter, even though it may have fewer benefits.

However, the different signs help to identify that all the choices bear some risk. If all the choices bear risk, the acceptor will be encouraged to request more benefits. This will happen, as in this case, when it is not possible to specify the risk level that makes the choices' benefits less attractive, or even, according to the paradox, when risk continues to be proportionally lower in choice $.A\beta$ than in $.\alpha B$.

The paradox occurs when all the choices bear risks, which entails a different negotiation strategy within a game that has not changed (game 2).

There is no certainty of the risk and it is not possible to make a calculation (benefit minus cost risk); there are only simple signs of risk that indirectly affect a game which does not change (game 2). This is why the paradox plays an important role, since game 2 is the same game presented in a different way thanks to the existence of a simultaneous game. With the existence of game 3, game 2 does not change, but the strategy varies.¹¹

This means that under a "certainty" effect (with choices with and without risk in game 2 alone), asymmetries are not discussed. However, under a "nothing to lose" effect, bets are made. This happens even if asymmetries are the same.¹²

The problem is that such risk cannot be a vague risk related to a third party but, instead, it must be an apparent risk among the actors.

¹¹ For different explanations of the Allais paradox, see Bethany J. Weber, "The Effects of Losses and Event Splitting on the Allais Paradox," *Judgment and Decision Making* 2.2 (2007): 115–125.

¹² Or in those cases where the risk measurement cannot be specified.

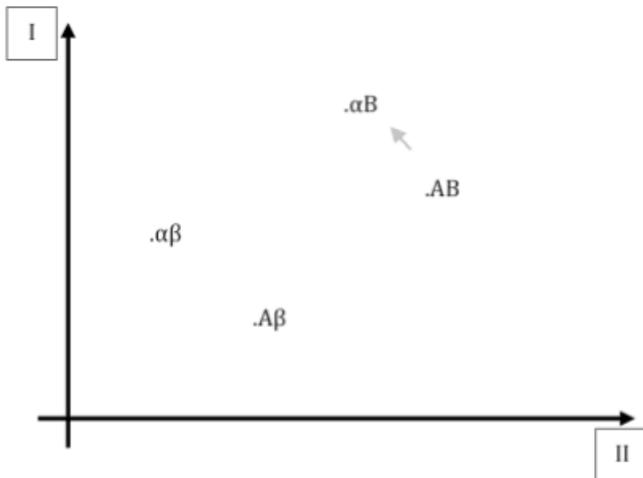
With public policy, it is not enough to intimidate based on the overall external risks and the police power of the state, since it is necessary to persuade the players about the existence of risks asymmetrically distributed among them.¹³ The goal is making the actors involved in corruption play against themselves. For example, it is especially necessary to develop policies acting on the acceptor's pride and the offeror's reputation.

Promoting the acceptor's threat is possible since the threat includes connections with secondary acts that, by themselves, do not have a direct impact on the acceptor. In this case, the threat is made due to a suspected unequal distribution of risks, information and benefits (which is certainly likely).

Victimization Game

There is a game that is based on the determination of one of the players (player II) to withstand corruption. However, under certain conditions, such determination may be undermined by a corrupt player. In other words, corrupt actors often draw in other players. To avoid being drawn in, it may be necessary to adopt a negotiation strategy that provides an escape.

Game 4: Withstanding



¹³ There are asymmetrical benefits that, at first, the acceptor does not discuss. Later, the acceptor may become aware of the asymmetrical information. Finally, with the appearance of general signs of risks, asymmetrical risks are expected.

The general risks and their (subsequent) perception of asymmetrical distribution enables the threat. The first takes place through signs, but the second derives from the idea of benefits and asymmetrical information.

If $.AB$ represents the status quo in this game, player I will want to draw player II into a situation of corruption in $.\alpha B$. At this corrupt point, player I has more gain and player II sees this point as a loss (due to its immorality, illegality or high risks, among other possibilities). To this end, player I (if he moves first) will threaten player II, causing a shift to α . This leaves player II with two choices, $.\alpha B$ or $.\alpha\beta$. While the latter choice may be a non-corrupt act, player II will prefer $.\alpha B$ and will become corrupt. The huge difference in gain between the two points undermines the determination of player II not to corrupt himself.

To avoid this, player II must be able to fulfill two conditions: moving first and making a conditional threat.

Making the first move in this game is not enough for player II. If player II only commits first to B, player I can shift to the corrupt point $.\alpha B$. In other words, although player II chooses B first, he falls into a corruption-prone position.

Player II has to commit himself to B only if player I commits himself to A. On the other hand, if player I decides to move to α (after player II chose B), player II should threaten β . This is an intimidating threat and it is expected that the unattractive choice for both sides, $.\alpha\beta$, will make them go back to point $.AB$.

Moving first and, simultaneously, making a threat are the requirements to avoid the victimization of corruption. Player II has to determine his situation, but he should also anticipate where to move in case another player attempts to draw him into a situation of corruption, which is potentially likely given the situation chosen by player II. In the face of a threat of corruption, it is not enough to anticipate the position, a threat must be made also.

In this case, an institution, for example, has two choices: either to develop rules that place the organization in an ethical position or to develop rules of position as well as rules of action (conditional threat). In other words, abstract rules that define one's own position are not enough to avoid the victimization of corruption. As we have seen in the game, it is essential to develop rules that specify actions to be taken in the face of a corrupt situation promoted by other actor's actions. A rule of position by itself does not deter the corrupt actor, so it is necessary to have rules of action. Such rules of action compel the player to act in a certain way within an organization in the face of a situation where there is risk of corruption. To this effect, rules should foresee different situations of risk and have action protocols that respond to risk in a certain way, just as it is essential to have human resources

with the knowledge and capacity to implement them. It is not enough to have simple “Codes of Ethics” that allow some leeway with regards to behaviors and do not specify the response movement in the face of a threat of corruption. It is necessary to make intimidating threats, such as the obligation to report, the immediate breakdown of a deal, or the preventive suspension of an employee, among others.

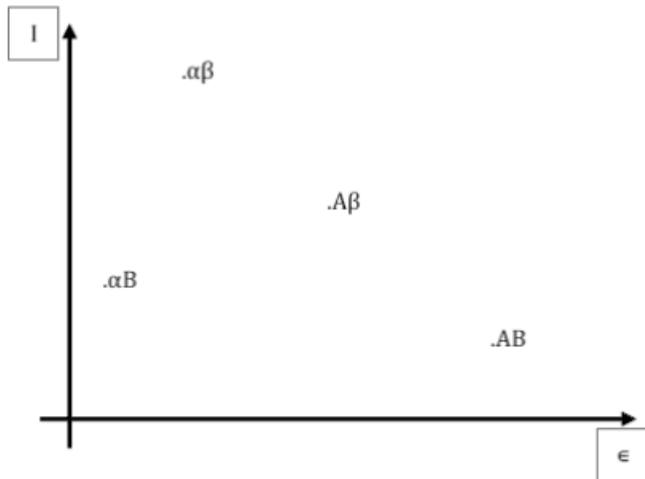
A well-specified set of rules acts as a position and as a threat, deterring the corrupt actor from promoting corruption. To succeed in this deterrence, it is also essential that these rules and their protocols are communicable. Communication should effectively reach the actor that promotes corruption.

In iterated games, the conditional threat may be strengthened by matters of positive reputation.¹⁴ On the other hand, a unique game requires greater efforts to generate the credibility of the threat.¹⁵

Public Policy Game

This game is about the action of the state (ϵ) when faced with a corrupt player (I).

Game 5: The State’s Function



¹⁴ Reputation can be a memory experience with the same actors (iterated game) or an experience with other actors and, hence, an experience that requires communication.

¹⁵ These could be formalization efforts, such as action protocols.

The corrupt player I wins in point $.\alpha\beta$, which we assume is a corrupt point that should be avoided. The state can avoid this if it makes a promise and a threat at the same time. The state must threaten $.\alpha B$ if player I chooses α , but it must also promise "not $.AB$ " if player I chooses A.

The threat alone will not induce player I to avoid α . This is because $.\alpha B$ is better than $.AB$ for player I. Player I will not choose A, unless "not $.AB$ " is promised to him. The outcome the state should seek is $.A\beta$.

This two-fold strategy of the state must be permanent in corruption situations. In other words, the state should threaten (sacrificing itself) and should also commit itself to abstention. Both strategies, not only one of them, should be implemented together to avoid corruption and reach satisfactory agreements. Neither a state that only threatens nor a state that only concedes, but both. In this case, the search for satisfactory agreements makes more sense if creating iterated games is an objective of the state.

The Siemens corruption case in Argentina is a good example for this game.¹⁶ This is a corruption case where the German company benefitted from a corrupt situation related to the payment of bribes to protect its contract with the state to produce national identity cards ($.\alpha\beta$). The state did not win at this point. There were two different views within the Argentine government: the Minister of the Interior threatened to terminate the contract ($.\alpha B$); on the other hand, the Ministry of Finance promised to renegotiate the contract on reasonable terms ("not $.AB$ "). Point $.AB$ may be a situation where having a contract with the state is worse than not having any ($.\alpha B$), due to the state's high demands. As Siemens' corrupt action was already under way (it was not a question of anticipating in this case), the state was obliged to fulfill the threat. However, if it had been a matter of anticipation, it is to be expected that the final outcome would have been $.A\beta$.

To avoid corruption, it is important that the state is willing to sacrifice its interests, for example, by terminating a contract if the other actor attempts to lead the state into a corrupt situation. However, in order to have a positive outcome for both parties, the state should also be able to commit itself to not choosing situations in which the other actor suffers a

¹⁶ Siemens-DNI Project, Argentine Court Ruling, Case Number 2645/98, December 23, 2013. See "Siemens Case: Judge Ariel Lijo Ordered Processing Seventeen Charged with the Offense of Active Bribery," Centro de Información Judicial, December 27, 2013, <http://www.cij.gov.ar/nota-12824-Caso-Siemens--el-juez-Ariel-Lijo-dispuso-el-procesamiento-de-diecisiete-imputados-por-el-delito-de-cohecho-activo.html>.

loss. For example, this means avoiding those contracts which are seen as worse (or more risky) than a situation in which there is no contract with the state.

As another example, the corrupting agent may be an internal actor of the state itself. In this case, the state may threaten to dismiss the actor and, at the same time, ensure working conditions that are not negative for the civil servant, thus using both threat and promise to arrive at a satisfactory agreement.

The two-fold commitment strategy of the state can be effective in a unique game, provided that the two-fold commitment's reliability is demonstrated. In this case, the iterated game may act as a means to build a reputation or as an objective of the state.¹⁷

Conclusions

The various games covered imply different lessons.

Win-win games show that analysis of negotiation requirements is needed to create anti-corruption strategies. In particular, is it necessary to understand that trust (under conditions of secrecy) enables the promise and, then, the creation of the final agreement. This allows us to identify bases that can be affected by a government strategy against corruption.

Understanding that it is necessary to affect the relationship of trust among corrupt actors and not insisting on external intimidating actions is a key step in the fight against corruption.

Then, the simultaneous games have enabled us to introduce the risk variable. Under conditions of trust and secrecy, the negotiation process among corrupt actors was focused on gains. However, introducing a simultaneous game about risks creates a high probability for the corrupt agreement to reach a stalemate. This is because the Allais paradox tells us that in conditions of apparent risk an actor may attempt to risk a little bit more and to seek more benefits. In our case, this enables a threat from the player who accepts a corrupt offer, and it is this threat, although untimely (after the offeror's move) and hardly intimidating, that provokes the breakdown of the corrupt contract. In these simultaneous games, it is interesting to analyze a series of strategies of the actor who offers and the actor who accepts

¹⁷ The two-fold strategy itself is a macro objective of the state, regardless of the actors that implement it and their responsibility for implementing or failing to implement such strategy in each context. Therefore, in this case, the important things are the institutions that oblige the state to pursue this objective and the organizational conditions that allow public officials to behave in this manner.

the offer of a corrupt deal. This is because public policies should aim, precisely, to alter the strategies that offeror and acceptor implement in the negotiation process. Again, a more specific analysis shows that the important thing is to affect the relationship among the corrupt actors.

On the other hand, a new game shows that withstanding corruption not only involves adopting an ethical position, but also anticipating risks and communicating a conditional threat. This game is about the victimization of corruption and provides us with tools of negotiation to avoid being drawn in by a corrupt actor. This is a relevant finding, since it shows that prevention is not just about anticipating and establishing one's own position, but also about being able to communicate to corrupt actors that one's behaviors will be very specific in the face of an external threat of corruption.

Finally, in the last game, the state is induced to confront a corrupt player. In order to avoid corruption, the state must threaten and promise at the same time. The state must threaten to sacrifice itself to discipline corrupt actors and must promise reasonable conditions to deter corruption. This is another relevant finding. A state's intimidating threat of an unfavorable position for both parties is not effective. Both parties lose. It is important to note that the state also loses in a game that seeks a final agreement between the public sector and another actor. The state's commitment to avoiding conditions that are unfavorable to the other actor is also important. The lesson learned is that a two-fold strategy is necessary. This means that a strategy that communicates punishments (which also affect the state itself) may be effective if there is also a clear policy that establishes that actors who are associated with the state will not be harmed.

All in all, the different Schelling's negotiation games provide us with useful lessons to define public policies aimed at mitigating or reducing corruption.

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Acknowledgements

I would like to thank Dr. Laurence Tai, Edmond J. Safra Center for Ethics Lab Fellow at Harvard University, for his review of and useful comments on this paper.



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