

BREXIT NEGOTIATIONS: HAWKS, DOVES, AND CHICKENS

By Edouard Vidon

Game theory provides examples and a few valuable lessons for negotiators, whether hawks or doves, such as the risk of “falling off a cliff” in the “game of chicken”. Investment bank strategists and academics have already started toying with such tools to analyse the Brexit “game”. Surely the negotiators’ war rooms have been paying attention.

Brexit negotiations: the clock is ticking



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In a game of chess, a player is said to be in [zugzwang](#) when any move made would worsen her position, yet passing one's turn isn't an option. The British Prime Minister may have experienced this situation when she finally triggered Article 50 of the Lisbon treaty, thereby kick-starting the proper Brexit negotiation process.

Game theory deals with strategic interaction between players with competing interests, and can be applied to describe conflict dynamics, to propose optimal negotiation strategies, and even to predict the outcome of complex bargaining problems.

In order to apply it to the Brexit negotiation process however, one first needs to determine what kind of game is being played. That includes figuring out whether the game may be cooperative or not, what the sequence of moves could be, and what the participants' preferences are over the possible set of outcomes.

Is it a cooperative game?

The principle of “**sincere cooperation**” is embedded in the Treaty on European Union (Article 4-3), and the EU expects it to apply even to negotiations with a departing Member State. Indeed, both the UK and the EU have gone to great length to convey the message that the discussion needs to be conducted in a cooperative manner. Mutual interest in a “fair and orderly” process leading to a “deep and special partnership” is highlighted in Theresa May's [notification](#) letter. The European Council's [statement](#) insists that the EU “will approach these talks constructively and strive to find an agreement” with the hope to have the UK as “a close partner” in the future. Furthermore, both sides have made attempts to define, before discussions start, what the scope and sequence of the negotiation should be.

Such “pre-play” negotiation is usually a feature of [cooperative games](#), yet the cooperative framework may not be that helpful insofar as no binding commitment mechanism exists. When pledges of “fairness” amount to little more than cheap talk, assuming non-cooperative behaviour provides better insight into the nature of negotiations. This view is corroborated by the veiled “threats” that can be read between the

lines of official communication on both sides: a hint at the possibility of the UK disengaging from European security and defence, and insistence by the EU on a sequencing that would put the divorce settlement before any discussions of future arrangements, at the risk of running the clock. For realistic prediction purposes, it is better to assume that a “hawkish” or a “dovish” negotiating stance will be adopted if and only if it is identified as leading to the preferred outcome.

Player preferences

The **expected payoffs** to the players under the various possible outcomes normally help pin down the type of game being played. Although national passions may interfere with economic calculus in the course of the discussions, we must take into account the democratic preferences that have been revealed: a more growth-friendly scenario could be rationally disregarded in favour of a different path with better features along other political lines. Once we consider payoffs in that broader sense, which are the standard games that can help analyse Brexit?

- The negotiation could be characterised as a [prisoner’s dilemma](#) if: (i) the result of both sides adopting a hawkish negotiating stance would be clearly *inferior* to that of both sides adopting a dovish stance, and yet (ii) both sides would be better off adopting a hawkish stance regardless of the other side’s attitude. However, the possibility of extensive communication and the signalling of intentions between the Brexit negotiating parties offers opportunities to avoid a bad outcome, especially if the negotiation is repeated in different areas of potential partnership (circulation of people, agriculture trade, financial services, defence, etc.)
- The “cliff” feature of the negotiation deadline (March 29, 2019) could point to the [game of chicken](#) as a relevant model to the extent that either side would have too much to lose from sticking to a hawkish stance all the way. In that case, the best response to one party being hawkish would be to adopt a dovish stance, and vice versa. The political stakes are such that brinkmanship cannot be ruled out in the context of Brexit negotiations (as exemplified by the claim that “no deal is better than a bad deal”). Yet the costs to each party of ending up without a deal appear too asymmetric for this model to be applicable.

Bargaining outcomes

There is much uncertainty however regarding the potential costs, and **incomplete information** regarding the payoffs associated with the various outcomes does make a difference in negotiation dynamics. In spite of the many efforts to model the various economic scenarios concerning, for example, trade agreements, little is known about the impact on welfare should negotiations collapse, which would likely trigger reactions in both the markets and in public opinion.

Furthermore, the prospect of negotiations being sequenced, rather than a parallel discussion of all aspects, may substantially change the nature of the game. The EU side is effectively proposing to play two different games successively: first negotiating withdrawal arrangements, involving a zero-sum game over the amount of the financial settlement (the Brexit bill), followed by bargaining over the nature of the future relationship, presumably involving a surplus (if only the gains from trade) to be shared with the UK.

Whether such sequencing is accepted or gives way to parallel talks, the plain [bargaining game](#) structure appears to be the most relevant framework to understand the thrust of negotiations. Bargaining problems allow for different solutions however depending on the possibility of making credible commitments, the sequence of moves considered, and the relative bargaining power of the players.

In its simplest form, the “ultimatum game” would consist in the EU making a credible take-it-or-leave-it offer to the UK. This is effectively the approach that was successfully employed to impose the notion that participation in the European single market was irrevocably tied to the acceptance of all four, indivisible freedoms (free movement of labour, goods, services, and capital), thanks to the commitments embedded in EU legislation.

For the purpose of settling the Brexit bill, committing to a single take-it-or-leave-it number could be more difficult. Threat of litigation, and therefore the possibility of enforcement of such a financial claim by an international court may play a role. Beyond agreement on broad calculation principles, the details could end up being linked to negotiations over the nature of the future partnership, if only because the latter could also involve financial obligations.

When it comes to discussion about this new partnership, the bargaining game commonly known as “dividing the dollar” (the pound or the euro in this case) is probably the most relevant. Such negotiations could typically take the form of an alternative offers game. In such a game, bargaining power is closely related to the relative **patience** of the players. There is however scope to reach an agreement that would improve – for both sides – on the default outcome (no deal), though the risk of a deadlock or a breakdown in negotiations should be taken seriously. A key aspect of the discussion will be whether the different components of a possible future partnership could give rise to separable bargaining problems, allowing incremental progress. At this stage the EU has signalled that nothing will be agreed upon until everything is agreed, although openness to bridge agreements has also been indicated. On this issue, among others, EU negotiation guidelines should be endorsed by April 29.

Now that both the UK and the EU have started the clock and played their opening moves, we will have a chance to see whether both sides are playing “fair” or (more likely) playing hardball. The chess analogy may yet prove useful, if the British player finds herself hard pressed to complete in only two years all the steps required for a successful partnership agreement: she would find herself in *zeitnot*.