The United Currency Wars*

'Prisoner's Dilemma' games illustrate conflicts of interest between parties.[1] They are based on a familiar scenario: two prisoners are incarcerated and face interrogation. If neither prisoner divulges any information, they will both go free due to lack of evidence. However, the police aim to coax at least one of them into talking. The promise is that if one prisoner speaks up, they will be spared at the expense of the other, who will be incriminated. With no means of communication, participants cannot ensure that the other won't speak first and implicate them. Ultimately, there is no guarantee that both won't eventually talk, resulting in mutual incrimination.

In scenarios involving conflicting interests, a comparable risk arises. This conflict pertains to disputes between states. A coalition of states establishes specific rules with the goal of achieving a balanced equilibrium of interests. However, due to conflicting agendas, each state faces the temptation to deceive the other party—ostensibly adhering to the agreed-upon 'rules of the game' while subtly deviating from them to advance its own interests at the other party's expense. Such a strategy is effective only as long as the deviation from the rules is minor. However, as the scope of deviation augments, and the other party opts for a similar strategy ("tit-for-tat"), all parties may lose.

This 'Prisoner's Dilemma' game reflects a conflict of interests regarding deviation from financial stability rules that were agreed by the parties (the "Alliance") as a major condition for the establishment of a united currency among them. These rules were dictated by the rich and strong partners to the weaker partners when the Alliance was established, to ensure that the latter would not financially collapse, dragging all the other countries with them. Respecting the stability rules requires strict financial discipline, something all parties find hard to maintain considering strong external and internal pressures. However, deviation from the stability rules would undermine the Alliance, weakening all its parties.

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* The framework for the game is inspired by a well-known Prisoner's Dilemma game developed by Ebner and Winkler and was adapted to the International Trade context by Nellie Munin. For the original game with detailed notes on preparing, conducting and debriefing the game, see: Noam Ebner & Yifat Winkler, *The Pasta Wars: A Prisoner's Dilemma Simulation-Game* Ebner, 40 Simulation & Gaming 134 (2008).

[1] The term was coined by Allbert W. Tucker, A Two-Person Dilemma, presented at the Stanford University Psychology Seminar (1950) but was conceptualized by Merrill M. Flood & Melvin Dresher, A Study of Rational Behavior in the Context of Conflict (RAND Corp., unpublished manuscript, 1950). See William Poundstone, Prisoner's Dilemma (Anchor Books 1992).

Instructions

Divide the class into four groups and read the instructions together. Give each group a sheet with the instructions, a slip sheet, and a balance sheet.

There should be no communication between the 4 groups. Messages from each group are passed to the instructor each round, using a slip from the slip sheet held by each group.

Each country must decide separately what its policy will be for the next month. They do not know what the other countries will do and will find out only after all slips are handed to the instructor.

The game is played for 3 consecutive rounds (this phase may be shortened to one round in case of time constraints).

Towards the **4th round**: The Alphaville Central Bank (ACB) announces that since the global financial crisis severely hit the Alliance's main global competitor (while the Alliance still manages to keep stable), in the next month any effect of the Members' financial behavior may be doubled. Consequently, the Members decide to send their representatives to a coordination meeting. It should be mentioned that the 30 years of Alliance did not wipe out the bad memories of the allies from hundreds of years of resentment and wars, and their relationships bear mutual suspicion.

Towards the **6th (or 5th) round**: free communication is allowed until the final decision is announced to the instructor. When a decision is given to the instructor, it will not be revealed by the instructor. This is optional.

Towards the **7th (or 6th) round:** the financial crisis that hits Alphaville at last makes market terms, including the options for profit and for loss, much more extreme. According to the Alphaville Central Bank, expected profit or loss may be X4. Due to the obvious potential danger to the Alliance's market, it is further announced that the fine for breaching the stability criteria will be extended proportionally to 400,000 AC per each month of breach. The Members decide to meet again. This is the last meeting – no other meeting will be possible before the 8th round.

After **the last round**, ask each country:

How much did each of you gain/lose?

If there were a ninth round – what would you do?

Would you form a 'coalition' in the future? With whom?

At the end of the game, you can announce that the ACB revealed that all four did not follow the criteria in the recent year. According to the alliance's agreement, each of them should be referred to the Alphavillian Court of Justice (ACJ) and be charged with a fine for each month of breaching the stability criteria. However, reference to the court of each Member is subject to a political decision the three of the four Member states.

Questions for discussion:

- What can be learned from this exercise regarding international trade interests?
- What are some of the similarities and differences you can find when comparing this game to international trade treaties you know?

- Considering your experience from this game and from real-life, if you were to draft a new international trade treaty, what would you make sure to include in it?

Note: to illustrate the "prisoner's dilemma" a minimum of 4 rounds will do. A longer game depends on time constraints and allows a greater focus on negotiation dynamics.

Background

After hundreds of years of wars and despair, four countries in Alphaville continent decided thirty years ago, to opt for an economic alliance (the "Alliance") which is legally identical to the European Union model. Since then, this Alliance, including four member states ("Member," collectively "Members"), is following the legal developments in the EU, updating its model accordingly. Consequently, when the EU concluded the Maastricht Treaty, establishing the EMU, this Alliance followed and created the AMU, relying on the same set of agreements.

All four countries are AMU members. However, Alpha and Beta share a similar size (big) and economic strength. Gamma and Delta, the other partners, are smaller in size and economically weaker countries that joined the Alliance to enjoy economic support from Alpha and Beta. Alpha and Beta consciously agreed to contribute more money to the joint budget of the Alliance since they were keen to get a political hold in Gamma and Delta to prevent these countries from turning to other influential countries, which are Alpha and Beta's political rivals. Yet another reason was Alpha and Beta's hope to enjoy cheap and interesting investment opportunities in Gamma and Delta.

When the AMU was established, stability criteria identical to the EU's 'Maastricht Criteria' were also established, and each of the four partners legally committed to them. The initiative to establish these criteria was from Alpha and Beta, who were afraid that if for some reason Gamma, Delta, or both become economically unstable, this instability may spillover to Alpha and Beta, endangering their economies.

If the four partners respect the stability criteria, each of them will gain net 100,000 Alphavillian Coronas (AC) per month. If one of them does not respect the criteria, it should be fined by 100,000 (AC) per that month. This sum will be contributed to the Alliance's budget but will only be used to finance further enforcement, so the Members cannot enjoy it for other purposes.

The Conflict

Unfortunately, in recent years all four allies find it difficult to fulfill these criteria and still enjoy incomes due to the global financial crisis. As their financial situation became tough, each of them (separately) concluded that if only one country breached the criteria, it may gain 300,000 AC per month. So, even having to pay a 100,000 AC fine, it will still enjoy a net gain of 200,000 AC. If two countries breach the criteria, each will enjoy a 200,000 AC gain, diminished to 100,000 AC net gain after paying the fine. If three breach the criteria, each will enjoy a 100,000 AC gain, but the fine will totally diminish it, so the net gain will be 0. However, if all the four countries breach the criteria and the financial crisis will hit them severely, each will lose 300,000 AC per month.

Members breaching criteria	Gross Profit	Net profit (after fine payment)	Members obeying criteria	Net profit
0	****	****	4	100,000
1	300,000	200,000	3	100,000
2	200,000	100,000	2	100,000
3	100,000	0	1	100,000
4	****	-300,000	****	****

Currency Wars

Monetary Policy Decision Slip

Month # 1 *Country* ________________ Decision: ________________	*Month # 2* *Country* ________________ Decision: ________________
Month # 3 *Country* ________________ Decision: ________________	*Month # 4* *Country* ________________ Decision: ________________
Month # 5 *Country* ________________ Decision: ________________	*Month # 6* *Country* ________________ Decision: ________________
Month # 7 *Country* ________________ Decision: ________________	*Month # 8* *Country* ________________ Decision: ________________

Profit / Loss Balance Sheet

Month #	**Our choice**	**Members breaching criteria**	**Members obeying criteria**	**This Month's Profit / Loss**
Total Profit / Loss:				