



WALL STREET GAME NEGOTIATION

Teaching Note

The “Wall Street Game” is an iterative prisoner’s dilemma game, adapted from the Program on Negotiation’s “Win As Much As You Can” (“WAMAYC”) exercise, also an iterative prisoner’s dilemma game... This version involves higher dollar stakes. Its name draws from a much-touted experiment in which participants were given a prisoner’s dilemma game but bearing two different titles: “The Community Game” and “The Wall Street Game”. The experiment’s results established that when titled – framed – as The Community Game, people were more likely to cooperate and generate optimal points with reasonably equal division. (People moved quickly to agree to “all Y” play, generating a point for each, with points multiplied at bonus rounds, and were less likely to breach those agreements.). When the game was titled – framed – as “The Wall Street Game”, people were far less likely to cooperate and most received lower point totals at the end, both individually and collectively. (Lieberman, Samuels, and Ross, “The Name of the Game: Predictive Power of Reputations versus Situational Labels in Determining Prisoner’s Dilemma Game Moves,” Vol. 30, Issue 9 *Personality and Social Psychology Bulletin* (Sept. 2004), pp. 1175-1185.)

The punch line is: “Under conditions of interdependence and repeat play, competitive choices ironically lead to lower individual and group scores.”

After using PON’s WAMAYC for many years, I switched to this version. I believe the point is stronger – the punchline hits better – by eliminating any ambiguity in whether “You” is supposed to be singular or plural (collective).¹ Even though my practice had been to explain “you” is singular” with WAYMAC, some students don’t quite believe it, or forget the instruction once discussing within their groups. I believe it’s cleaner with “Wall Street Game” as the title if your purpose is to drive home the point that competing – under conditions of mutual interdependence and repeat play – will mostly (90% of the time) lead to lower *individual* points than cooperating from the start. That matters, particularly where a lawyer is representing a client who wants the real-world analog to high individual points. Clients are not particularly impressed by lawyers’ being collegial and cooperative in a small legal market if that cooperation doesn’t benefit the client.

Placement in the Course and Setting it Up

¹ I first learned to teach Win As Much As You Can in a way that capitalized on the inherent ambiguity in whether the goal was for “you” *plural* or “you” *singular* to win as much as possible. When participants would ask, some instructors would refuse to answer the question. That later seemed disingenuous, as it tended to lead to some preachiness in debriefing: a comparison of group scores and observation that if only people had sought to benefit the group, group results would have been better. In approximately 1988, Mike Wheeler, then an affiliate of Endiispute Inc. and Director of MIT’s Lincoln Center for Real Estate Development, later a Harvard Business School Professor, convinced me that emphasizing “you singular” was the better way to teach it. When students unabashedly seeking to maximizing individual gains by competing ended with astoundingly low scores, the point was clear. The vast majority (usually 90%) of participants who cooperated ended up with higher individual scores - the stated goal.



I have chosen to make this the first exercise in the first class session of a Negotiation course for two reasons: it creates a common and oft repeated reference point throughout the rest of the semester; and it's easily separable. Thus, students who add into the course after the first week won't miss the beginning of the sequence of negotiation simulations.

There are choices in the way to set up and play the game. I generally hand out the instructions during class – not before – and put students into groups by their “student numbers”. Group A, is students #1-4, Group B is students #5-8, and so on. (It's my practice to assign each student a number on a class list right from the start because that makes it easier to assign pairings as the course progresses. My goal is to avoid students negotiating with the same classmate twice, especially in the first half of the course, to the extent possible. If you make assignments by number, you can pair using number patterns (even # vs odd # +1 or =2, and so on).

Explain the instructions briefly, give them a few minutes to look it over, put them into their groups. You can also distribute the instruction sheet to everyone AFTER they are in groups. Though I have never done a statistical analysis of the difference, my guess is that they are more likely to have exchanged pleasantries and introductions if they are already in groups, waiting for the instruction sheet. This could affect the way they play. That's why it's important to give them a strong instruction, ASAP, that they are henceforth NOT permitted to talk with each other except during designated periods within the exercise.

After they've had a moment or two to look over the instructions, I generally review and summarize. It's wise to give an example of how the scoring works, emphasizing that their score in each round is affected by the group's pattern of choices, and that the bonus round scores involve multiplication of both positive and negative scores. It's helpful to give them an example of how the numbers would work in a hypothetical round. For the example, I generally use: “what if two people in your group threw an X and two people threw a Y? The two Xs would get 20 points each and the two Ys would lose 20 points, counted as a negative 20.” Remind them that they should each keep a running record of the pattern in each round, as well as their own scores for each round, and their subtotals along the way. Offer to answer any questions. Inevitably someone will ask about the goal: is it to win as much as we can individually or as a group? (On the rare occasion that no one asks, I pose the question for them. “Some of you might be wondering whether the goal is individual or group points.”)

My unambiguous response is that their goal is to maximize individual points. However, it's absolute points, not relative to others. So, if the others in your group have as much as you do, or close, that's perfectly fine with you. On the other hand, if you have a low score, which ends up being the highest among a group with relatively lower scores, that's no win. You aren't measuring yourself against others and your group is not being measured against other groups. Your goal is to play the game in a way most likely to yield you a great score, relative only to what is possible. (I can't tell you how many times I've given this



instruction, only to have students say they felt like they won because theirs was the highest score within their low-performing group. It seems baked into our culture.)

After the instructions and any question, we play the game. I generally “call the rounds.” I’ll say: “is everybody ready for round one? Now 1, 2, 3 play!” Then remind them to look at the group’s choices, mark them down, mark down their own score... no talking...ready for the next round? And so on. I recommend wandering around the room to see if anyone is unsure of how to score. The same routine follows through the end of round 4. Remind them to bring their individual subtotals up through round 4. Then let them know: “We are now at round 5, which is a bonus round. Everyone’s score from this round will be multiplied by 3. You may have 5 minutes to talk within your group. You can talk about anything you like, but you might want to negotiate what will happen next.”

Let the hubbub happen and walk around the room to get a preview of the dynamics and scoring patterns. After 5 minutes, reinstate the “no talking” rule and call the 5th round. Rounds 6 and 7 proceed right after, the only pauses are to make sure everyone is ready to play a next round.

Repeat this for the bonus round #8 (scores are multiplied by 5), and round 10 (scores are multiplied by 10). I generally allow 4 minutes of talking before round # 8 and only 2 or 3 minutes before round 10. Also, and this may be important, after I’ve called “no talking” at the end of the time, I like to say: “Okay, I know you’ve all talked about what will happen, but I’m going to give you 30 seconds to think about what you’ll do, before calling the play.” I do exactly that, and then call the play.

After the tenth round has been played, instruct everyone to total up their individual points. It’s a good idea to ask for one person in each group to be ready to read off each score.

To collect and display the results, I use a ppt with blanks, generally in table format, and fill them in as call on each group and ask for the individual results. (If you have a very large class, this may take too much time. Then I suggest asking if there are any individuals with scores higher than 250? Higher than 200? Mark the names &/or number of students, perhaps naming those whose scores are higher than 300 or so.) Then inquire at the lower end: how many people had negative results – lower than \$0?

By this time, based on what you would have observed in the room during the play, you will have an idea of which groups reached an early agreement not to play X, and in which groups a breach of the deal occurred.

There are any number of ways to start this debriefing. I generally begin by asking: How many people decided – before the play – to begin by playing a X in the first round? Why? People observe that the X wins positive points in three out of four possible combinations, so it’s a less risky move; they have a 75% chance of winning something, or at least not losing points. Then I ask who decided to play Y in the first round? Ask them why? Typically, people say they could see it was a way for people to win if everyone did it; it



seemed like a “nicer” move. Sometimes they suggest it sends a signal about how they view the game, that they plan to make more friendly or cooperative moves. Less often, some will say that they read the chart, saw that X seemed less risky but reasoned that everyone else would read it too and realize that if they all make the same calculation – play X – they will all lose. So, they anticipate or hope others will figure this out and play Y too.

I DO always ask of the Y players: how many of you who played Y, were confronted with at least one X in that first round. Most will raise their hands. I’ll ask the Y players how they interpreted the others’ X move: what impressions did they have of the X players?

Often, an insight to pull out is that most X players thought of their first X as defensive, based on risk assessment, but the Y players interpreted X moves as aggressive or selfish. Openings matter. Signals matter. It’s worth considering how your opening moves in a negotiation will be interpreted by the other.

I then ask, of all the Y players who were met with at least one X in that first round, how many nevertheless played a Y again, in the second round? Generally, quite a few hands raise. Ask them why? The answer you are seeking (that makes sense) is something like: “When I threw the first Y, it was a signal of how I would play, but they couldn’t know that before the first round. So, when I played Y again, it was in the hope they would pick up the signal, take the invitation to play Ys with me.

This makes sense, and you can make a point about “charity of interpretation” and restraint from immediate retribution when the other might not have had an evil motive before the first round.

Finally, ask who had played Ys the first two rounds, was always met with at least one X, but still played a Y in the third round? There will be a few. Ask how many negative/losing points they had accrued by then? Ask why they decided to play Y again? Sometimes they will say the others in the group had seemed to be coming around – they went from 2 or 3 Xs to only one. Okay.

Some will say they decided, as a matter of principle, they were only going to play Ys. Push on that a bit: If the others know you’ll just keep playing Ys, doesn’t that create an incentive to keep playing Xs? Are you rewarding behavior that is harmful to you, rewarding to them. (Prof Michael Wheeler used to tell a story about Henry Kissinger meeting with someone – Nixon? – when his dog kept interrupting and nuzzling at his leg, despite orders to stop and go away. Finally, they gave the dog a treat and said, well that taught him. On the contrary said Kissinger, you’ve taught him to keep bothering you.”)

While being a “patsy” or enabler rewards X behavior, over-punishment/failure to forgive makes recovery difficult or impossible. If a Y player is greeted with Xs after two or three rounds, and then chooses to only play Xs after that – no matter if other players move to Y’s, how does that help? The punchline is “be provokable” and forgiving. At this point, I cite to



a famous experiment by Robert Axelrod in which computer programmers were told to program moves and responses in an iterative prisoner's dilemma game of many rounds. The goal was to program in a way that brought about stable Y play. The most robust program strategy was simple: "tit for tat." If an X is played, the program plays an X. If a Y is played, the program plays a Y. Over time, the play shifts to all Ys. (Axelrod, Robert, "Effective Choice in the Prisoner's Dilemma," THE JOURNAL OF CONFLICT RESOLUTION, Vol.24, No. 1 (Mar. 1980), pp. 3-25.

The takeaway is: be provokable; don't be a patsy; don't reward X play; be forgiving enough to reward Y play.

Sometimes, a student will say that playing Y in the first four rounds was a strategy to be viewed as cooperative, trustworthy, selfless, etc., before the fifth round. In that round, he would encourage group agreement to abstain from Ys all the way through. His adherence to the terms would not be questioned. No one would suspect his plan to breach the agreement in the 10th round, for 10X the points.

Yes, Machiavellian, but effective, and there's a lesson in it. If you want to be viewed as credible - to gain trust - act in that manner, until you choose not to.

Whether or not a student articulates this Machiavellian strategy, you can transition to the question of agreements reached, and kept or breached.

You might segue here into the dynamics of the pre-fifth round discussions/negotiations in the group. How did these affect the subsequent play. How did the ability to communicate matter? What did people say or do that engendered trust or mistrust? If someone was advocating for "all Y play here on in," what made that proposal persuasive or not?

Ask how many groups reached an agreement that all would play Ys for the rest of the game?

How many groups kept that agreement all through? Point to their scores.

Hmmm, how many groups experienced a breach of some sort?

In the fifth round? What happened?

There are several common reasons for fifth round breach: I didn't trust the others would keep it. One of the people in our group was quiet and didn't really agree. Or, that person might say: I never agreed, or they didn't ask my opinion.

More often, there will be a breach in round 6 or 7, and the X players will protest that they didn't realize the agreement was supposed to apply for ALL subsequent rounds. They thought it was just for the fifth round. It's easy to make a point that the terms of an agreement should be clear, and it's important to make sure everyone has signed on. Don't assume it.



If someone says they didn't trust a particular person in my group to play Y, pursue that a bit. Usually, untrusted person had been an X player in early rounds, causing the others to doubt his commitment to Y play.

Often, the agreement is breached (and the group is upset) when an X is played by someone who seemed so trustworthy. Pursue that. You'll often find that the X player had played Ys in early rounds and had far lower points than their classmates. The X player feels justified; they needed to catch up. Sometimes, the X player will have requested an "equalizing round" – a planned pattern of play – 3 Ys to their X in the fifth or a later round. If that request is rebuffed, revenge is taken – with some righteous justification. The takeaway is: beware the revenge of the downtrodden – the one for whom the game no longer offers much value.

You may find that, some groups do affirmatively adhere to an agreement to a catch-up round, enabling the member with lower points to play a planned X against 3 Ys. This can be wise, and the group agreement to play all Ys thereafter tends to hold.

It's good to spend some time discussing what happened in groups AFTER a breach. How did they feel about it? Betrayal of trust. How did they play thereafter, and what if anything did they discuss or agree upon in the 8th or 10th rounds (when again permitted to talk). Often, once the deal is broken, the group does not try or cannot reach or keep another agreement. Trust is fragile, easily broken.

What works to rebuild trust? Well, it helps if the breaching members have a credible explanation: I didn't understand the deal was supposed to last forever. I turned my X card over by mistake, really. I hadn't really agreed because I was so far down. (In other words, if it wasn't a character flaw, a Machiavelli move, we may trust again.)

Really though, here's the takeaway: it's not wise to rely on trust alone, especially if the stakes were real – your client's \$. And especially where the incentive to cheat/breach gets stronger as the game progresses through bonus rounds.

Did any groups take steps – even before the fifth-round play – to protect against breaches of their agreements? Some will have asked group members to sign a document. If not, you can ask whether signing an agreement would have helped? Maybe socially or psychologically a law student will hesitate to breach a signed agreement. But really, could you sue? What is the paper worth?

Ask if there was any other way to protect against breach. Occasionally, students will have agreed to some post game penalty if the agreement is breached. I tell an anecdote (from B. U. Law Professor Eric Green, my former boss at Endispute, Inc, back in the day): one time, a group of students brought their student ID cards down to the professor and authorized him to cut up the card of any student in the group who breached their agreement. Student ID



cards were notoriously difficult to replace. The punchline, of course, is to create enforcement mechanisms that create incentives to keep the agreement. Do this BEFORE a breach, and surely after one is discovered, with stages still left to go in the game (or real life transaction). Recognizing that this is a game, you can note that various types of transactions or business relationships proceed in stages. Construction contracts are a good example.

At some point, I deliberately highlight the few students whose point totals are MUCH higher than 250. These are likely students who breached an agreement by playing Xs in the final round. (There may be a few who gained more points with an X or two or three before the fifth round, and their group's all Y agreement then held through the rest of the game. But they won't be dramatically above 250.)

First, call out those students, and immediately assert that the rest of the class owes them gratitude, not hissing or revenge. They taught us all very important lessons, and this was just a game. Ask them how they got to their very high scores and why. Usually, they'll say "yes, it was a game, and we were supposed to win as many points as we could and that's what I did." (It's sometimes worth observing that some people view a game as "just a game" and others take play as more serious indication of character, etc.) Some of them may have been down because of Y play and negative points in the first few rounds and decided to claim points in the last round. Again, high points were the goal. Was there a slight risk that all the others would also play X in the last round? Yes, but what did they have to lose? After all, it was the last round.

Raise the question: how often do we really have a last round, especially in Cincinnati, or in any place where lawyers know each other? Let's say that a student who breached in the last round is going to be negotiating with a classmate in next week's negotiation class. Will that affect next week's negotiation? What do you think? Does it matter what their motivation or circumstances were?

Step back from the exercise: what's problematic about the way it's structured? Why does it encourage a breach? The answer is: the incentive to breach rises dramatically in the (apparent) last round. As lawyers, how can avoid this problem? In a multi-stage transaction or a multi-step implementation (think construction contracts), structure it so that large stakes inter-dependent actions occur in the middle stages – not at the end. When there's little to be lost or gained by a breach at the end, parties will see the wisdom of protecting their reputations. If not, there's little to be lost. DO build in enforcement mechanisms. And remind the parties that the last round need not be the last deal.

The largest overarching lesson of this game is that cooperation (Y play) yields consistent, reliable gains under conditions of mutual interdependence and repeat play. Refer back to the class point scores. Presumably, everyone was trying to win as many points as possible. If participants had just played Ys all the way through, each of them would have ended with 250 points. Many (not all) thought they had to compete (even by cheating) to accomplish



high scores. Yet, the cooperative strategy yield of \$250 points is higher than the yield realized by 90% (approximately) of people adopting competitive strategies. It's true that a few students – those who breached and threw Xs in the last round – achieved significantly more than 250 points. But at what cost? Wasn't it a risky move? (What if the others had also played X in that last round? And of course, what if it's not the last round.) In negotiations that occur where there is mutual interdependence and repeat rounds or interactions, it's wisest for everyone to adopt a cooperative strategy. Be provokable, not a patsy. Be forgiving. Make sure agreements are clear and adopted by all. Beware of the revenge of the downtrodden; be generous with someone who may have the power to sabotage a deal in later rounds. Don't rely on trust alone: institute enforcement mechanisms to align incentives with cooperative moves. Don't structure a deal so that the highest stakes are in the last round. Remember and don't forget to remind others that it's not necessarily the last round.