River Corporate Advisors
Newsletter

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Applying "Nash's Equilibrium" to M&A Negotiations

By

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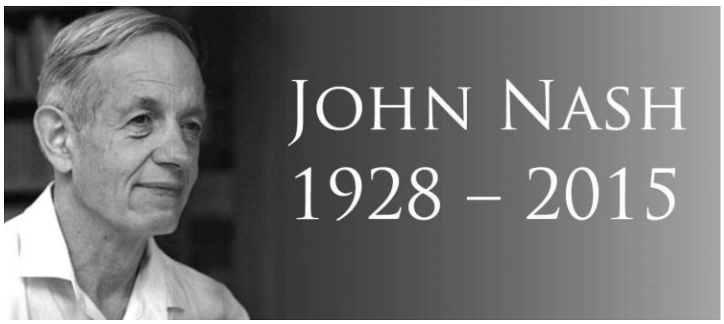
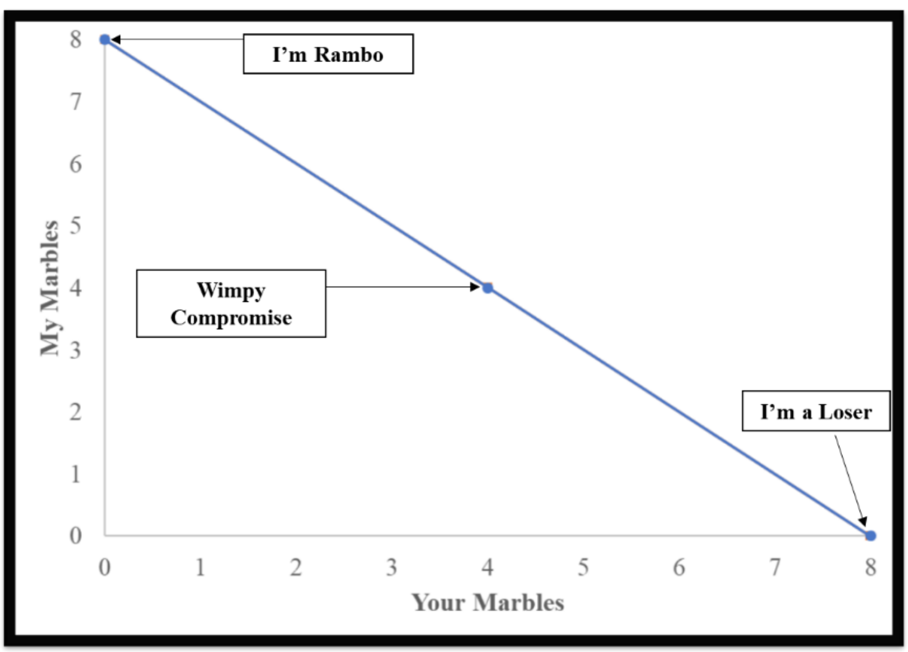


I first learned my craft on Wall Street in the 1980s, a very different era, characterized by the bravado of Gordon Gekko's "Greed is Good" speech. During that period, I was taught that all negotiations are zero-sum games. If I win, you lose. That philosophy is illustrated by a graph line with a negative slope. If there were only eight marbles in a negotiation, the curve would look like this:



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In M&A negotiations that translated to one-dimensional thinking: Representing the seller, I only cared about maximizing price. Representing the buyer, I only cared about minimizing price. In retrospect, I was a poor negotiator.

Two experiences dramatically caused a change to my method: First, I became a "seller" when I sold my business to the second-highest bidder (more on that in future articles). Second, I was fortunate to study Organization Behavior under Dr. Robert Bontempo at Columbia Business School. He taught a range of highly useful management theories, but the most impactful was Nash's Equilibrium.

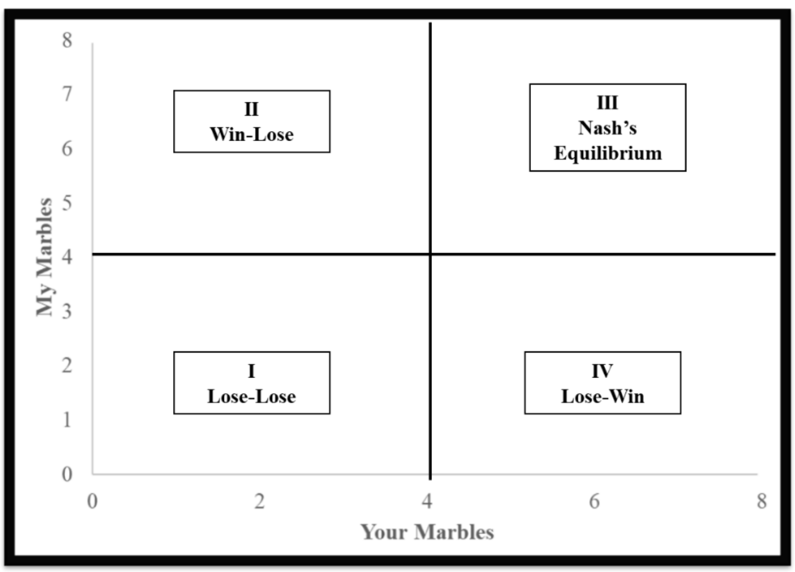
Investopedia defines Nash's Equilibrium as:

> "The solution to a game in which two or more players have a strategy, and with each participant considering an opponent's choice, he has no incentive, nothing to gain, by switching his strategy. In the Nash equilibrium, each player's strategy is optimal when considering the decisions of other players. Every player wins because everyone gets the outcome they desire. To quickly test if the Nash equilibrium exists, reveal each player's strategy to the other players. If no one changes his strategy, then the Nash equilibrium is proven."

There are many gaming exercises, such as ***the prisoner's dilemma***, that demonstrate the theory.

Dr. Bontempo divided us into groups of two, one player was the buyer of a business, the other the seller. Each player was given a set of criteria (price, employee retention, non-compete, etc.) which was ranked by importance.

The idea was to negotiate a deal that was in the third quadrant (shown below) in which both sides are satisfied:



The catch was: one player could not share their priority list with the other.

I thought, with my years of Wall Street experience, this was going to be child's play. So, I morphed into my Gordon Gekko persona and got to work………………………. and proceeded to get the lowest score in the class. Why? My attempt to win on all points, rather than pursue compromise resulted in the seller

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leaving the negotiations. Humbled, I examined the reasons for the failure. Simply put, I was using the old 1980s "take no prisoners" approach to a complex situation.

Fortunately, the real-life application of Nash's Equilibrium can differ from game theory exercises. In these exercises, one player must guess the other's criteria or decision-making process. In M&A negotiations, you can ask. I know this sounds naïve. After all, one is not allowed to disclose too much in negotiations, right?? Wrong. Frankly, amateurs play by that rule. Professionals know that those games dramatically slow down, and often derail, the process.

How do you initiate an open and frank dialog with the other side? Through trial and error, I developed these approaches:

- **Build Trust:** Do this by being candid about your own side's issues and goals. For example, I will have the "warts and all" conversation early in the relationship. This conversation has two mutually exclusive results, the counterparty either: (i) appreciates the frank dialog and becomes more transparent with you; or (ii) bails on the transaction altogether. Don't worry if you get the latter outcome. All it means is that you ended the discussion early in the process and saved a lot of brain damage. (Watch out: amateurs will advise you to "wait until the other side is more invested in the process before disclosing bad information").

  For example, I once represented a German company seeking to acquire the chemical division of a large U.S. conglomerate. This division had a spill site that required environmental remediation but was not willing to pay for the clean-up since it decided to exit the chemical business. This fact was disclosed ***on day one*** along with estimates for the cost of the remediation project. Most of the buyers did not want to deal with the headache and walked away. My client opened a dialog with the seller and both sides agreed to lower the price by the cost of the remediation and structure certain indemnities into the purchase and sale agreement. Building trust early is a strong pathway to closing a transaction.

- **Do your homework but don't be afraid to be the "Dumbest Person in the Room:"** Great interviewers have several things in common including: (i) doing their research and using it to create a game plan for the discussion; (ii) being sincerely self-deprecating; (iii) asking relevant follow-up questions; and (iv) getting out of the way when the other side starts talking. At this point, use your prepared questions effectively but sparingly to steer the discussion. Feather the questions into the discussion so it is more of an open exchange of information than an interrogation.

  Too often there is a more bombastic personality involved who must be the "Smartest Person in the Room." This person tends to suck the oxygen out of the conversation, causing the other parties to clam up, and thereby hindering an open dialog. If you initiate the lowering of your defenses and share information, you will create an opening to learn what you need to know more efficiently.

- **Avoid the phrase "Deal-Breaker:"** Of course deals can reach an impasse, most of which are resolvable and some may not be. Remember that for every action, there is an equal and opposite reaction. Saying the term "deal-breaker" can cause the other side to dig in their heels. When you reach such an impasse, the best response is to back up, check your ego at the door, and reach out to the other side and say, "We have a tricky issue I need your help resolving." Discuss each party's concerns and ways to address them. Often, you will find a solution and come to a more successful close.

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The Nash Score Card

OK, Back to Dr. Nash

Once you have established an open dialog, don't be afraid to ask direct questions. For example, "Besides valuation, what other criteria are you factoring into your decision?" Also, be an active listener by asking pertinent follow-on questions to the given answers (e.g. why is employee retention important to you?). You can then create what I call a Nash Score Card (NSC), which is a list of acquisition/sale criteria in terms of importance to the relative party. Here is an example:

Buyer	Seller
Price	Employee Retention
Non-Compete	Price
Escrow	Non-Compete
Employee Retention	Escrow

Once you have the NSC, the structure of the transaction becomes apparent. In the example above, the seller looks willing to compromise on Price in exchange for Employee Retention, which aligns well with the buyer's priorities.

Real-Life Negotiation Example:

My investment banking firm, River Corporate Advisors, was engaged to advise on the sale of a healthcare services company that was 50/50 owned by two brothers. After the initial marketing process to potential buyers, we obtained an offer that was acceptable to both brothers. However, prior to executing the letter of intent, one of the brothers (Brother 1) suddenly informed the team that he believed he had played a greater role in growing the business over its 10-year history and, therefore, deserved a greater share of the sale proceeds. The second brother (Brother 2) did not accept the premise of the statement and chose to hold his line and stick with the original agreement between them, saying "A deal is a deal."

Rock meet hard place.

I attempted to broker a deal between the brothers before even going back to the potential buyers. Would you take 55/45, 53/47, 52/48? No, no and no! I had defaulted back to the old zero-sum game rules of negotiation and predictably failed.

Fortunately, the company's Chief Operating Officer and long-time counselor of the brothers' family intervened. He had a vital piece of information: the brothers owned a piece of real estate with their two sisters, each owning 25% of the building. Brother 1 had lost interest in the real estate holding long ago.

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So, with this new information the Nash Score Card had evolved to the following:

<u>Brother 1</u>	**<u>Brother 2</u>**
Majority Ownership Real Estate	Real Estate Equal Ownership

With the new information, Nash's Equilibrium was achieved by providing Brother 1 with an additional 2% of the ownership in the company in exchange for his real estate interest.

Neither brother had changed his strategy (Nash's Equilibrium) and we closed the transaction.

#NashEquilibrium

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#ProfessorBontempo

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