Deal-Certainty Signaling in the
Netflix–Paramount Bidding War for Warner Bros. Discovery

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1. Situation and Motivation

This acquisition battle is a high-stakes strategic interaction that illustrates the general eco nomic problem of information asymmetry in capital markets. Netflix (N) has signed a definitive agreement to acquire Warner Bros (WBD, WB, T) at $27.75 per share, while Paramount (P) has countered with a $30 unsolicited bid. However, T currently views P's bid as risky due to financing concerns. This creates a classic signaling game: can the challenger credibly prove their "type" is reliable? Analyzing this situation is not only relevant for these firms but important for society generally, as solving such "lemons problems" is essential for market efficiency and ensuring assets move to their highest-value users without being blocked by friction or uncertainty.

2. The Game

Players:

- **Paramount Skydance (P):** The challenger bidder. They privately know their type $t_P \in \{G, B\}$, where G is "Good" (credible financing/regulatory path) and B is "Bad" (fragile).
- **Netflix (N):** The incumbent bidder with a signed agreement.
- **WBD Board (T):** The target, acting to maximize shareholder value.
- **Nature/Regulators (R):** Modeled as a probability move determining if the deal closes.

Timing (Extensive Form):

1. **Nature** draws Paramount's type $t_P \in \{G, B\}$ with prior probability $Pr(G) = p$.
2. **Paramount (P)** observes t_P and chooses a bid package $a_P \in \{Exit, Soft, Commit\}$.
   - Soft: Higher price, but standard conditional terms.
   - Commit: Higher price plus a costly signal (for example, massive escrowed reverse termination fee).
3. **Netflix (N)** observes a_P and chooses $a_N \in \{Hold, Improve\}$.
4. **WB (T)** observes the actions (a_P, a_N) but not t_P, so it updates its beliefs $\mu(G|a_P)$, and chooses $a_T \in \{Accept\ P, Accept\ N\}$.
5. **Nature** determines the outcome (Close or Fail) based on closing probabilities $q_P(t_P)$ or q_N. Payoffs are realized.

Payoffs and Parameters: Let P_N and P_P be the per-share offer prices. Let V_0 be WB's standalone value if no deal closes.

- q_N: Netflix's probability of closing.
- $q_P(t_P)$: Paramount's probability of closing, where $q_P(G) > q_P(B)$.
- B: The break-up fee WB pays Netflix if they switch to Paramount.
- F_N: The Reverse Termination Fee Netflix pays WB if the deal fails.
- F_P: The Reverse Termination Fee Paramount pays WB if the deal fails.

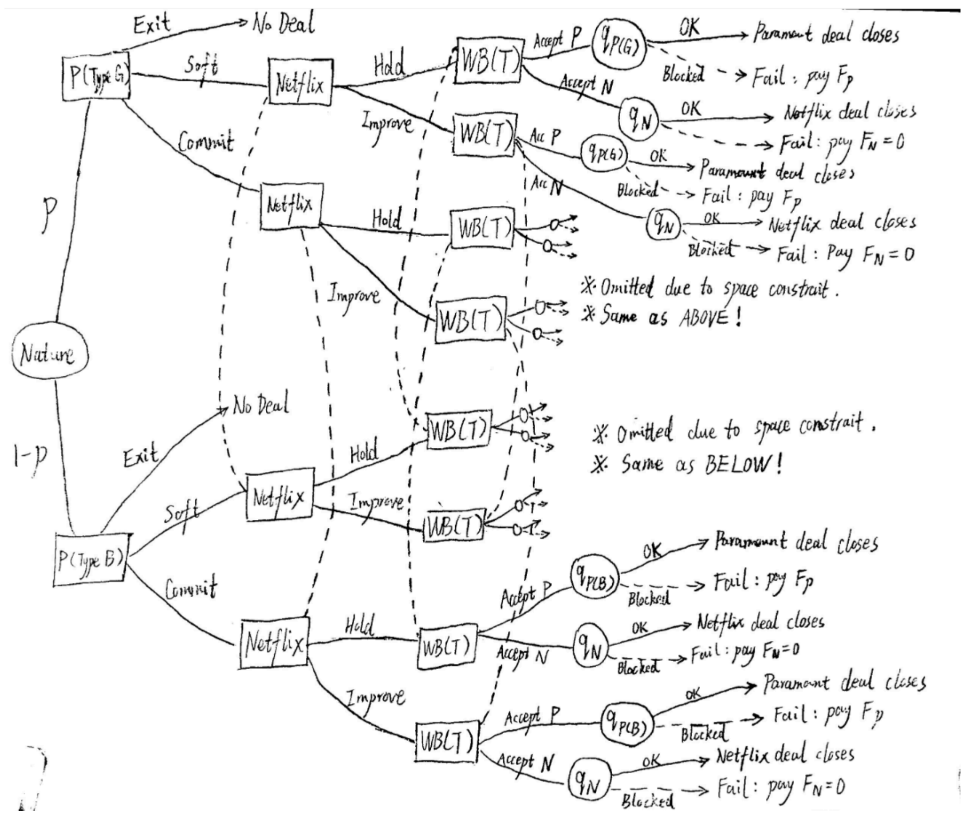
The Target's expected utility (U_T) from accepting bidder i is:

$$U_T(i) = q_i P_i + (1 - q_i)(V_0 + F_i) - \text{Switching Costs.}$$

Note that If T accepts P, the Switching Cost is B. If T accepts N, Switching Cost is 0.

Bidder Payoffs: We normalize each bidder's payoff to 0 if they lose. If bidder i wins and the deal closes, they realize a surplus $S_i > 0$ (synergies minus effective price). If they win but the deal fails, they pay their reverse termination fee F_i (with $F_N = 0$ in our baseline). This simple structure defines the incentives for P and N while keeping the model focused on WB's inference problem.
Numerical Intuition: Even if $P_P > P_N$, the effective premium is reduced by the switching cost B and by failure risk $(1 - q_P)$, so WB may rationally prefer the safer bidder.

3. Equilibrium Analysis



Note: "WB" in the diagram denotes Warner Bros. Discovery (WBD).

Equilibrium Decision Rule: Given observed actions, T accepts P if and only if:

$$\Xi[U_T(P) \mid \mu] \geq \Xi[U_T(N)].$$

Let $\mu \equiv \mu(G|a_P)$ and define the belief-weighted closing probability:

$$q_P(\mu) \equiv \mu * q_P(G) + (1 - \mu) * q_P(B).$$

Then WB prefers Paramount when:

$$q_P(\mu)P_P + (1 - q_P(\mu))(V_0 + F_P) - B \geq q_N P_N + (1 - q_N)(V_0 + F_P).$$

Assumption (for simplicity): we set $F_N = 0$ (Netflix does not pay a reverse termination fee in our simplified model). This makes Netflix look more attractive, so our "Paramount must signal hard to win" result is conservative.

Dominated Strategies: Under our stylized setup, there are no strategies that are strictly dominated for all parameter values (as payoffs depend on B, closing probabilities, and the magnitude of F_P). Instead, the key constraint is Incentive Compatibility: for Type B, choosing Commit is unattractive because the expected fee cost $(1 - q_P(B))F_P$) outweighs the potential benefit of acceptance. This explains why Type B will not mimic Type G in a separating equilibrium.

Separating Equilibrium: In a Separating Perfect Bayesian Equilibrium, actions reveal types.

- **Strategy:** Type G plays Commit; Type B plays Soft (or Exit).
- **Beliefs:** $\mu(G \mid Commit) = 1$, $\mu(G \mid Soft) = 0$.

For this to hold, the Incentive Compatibility conditions must be met:

1. **For Type B (Bad):** The cost of "Commit" must be too high. The cost of the signal is the expected payout of the Reverse Termination Fee: $(1 - q_P(B))F_P$. Since $q_P(B)$ is low, the probability of failure $(1 - q_P(B))$ is high. Thus, mimicking a strong bid is prohibitively expensive for a fragile bidder.
2. **For Type G (Good):** The cost of "Commit" is acceptable. Since $q_P(G)$ is high (deal is likely to close), the expected cost $(1 - q_P(G))F_P$ is low. They are willing to risk the fee to win the deal.

Validation: This relies on the Single Crossing property. The marginal cost of the signal (F_P) is strictly lower for the Good type than the Bad type.

Pooling Equilibrium: If the "Commit" signal (F_P) is not large enough, or if financing costs are low, Type B may mimic Type G. Both types play Soft (or a weak Commit).

- **Beliefs:** WB learns nothing new. $\mu(G) = p(\textit{the prior})$.
- **Outcome:** If the prior p implies a low average q_P, WB rationally rejects both types because the risk-adjusted value (minus B) is lower than Netflix's certain deal.

4. Predictions, Reality, and Interventions

Model Prediction vs. Reality: If Paramount cannot credibly signal high deal certainty via a costly mechanism, the model predicts a **Pooling/Weak-Signal outcome** where WB rejects the higher price.

Reality (as of 12/17/25): Reporting confirms this model. WBD is rejecting Paramount's $30 bid in favor of Netflix. The withdrawal of backer Affinity Partners suggests t_P might be B, or at least that q_P has dropped. WB is acting as if $\mu(G)$ is low. Consequently: $U_T(N) > U_T(P)$. This holds even though $P_P > P_N$, because the expected penalty of failure dominates the price premium.

Interventions: WB can force a separating equilibrium by demanding a "Hell-or-High-Water" clause or a pre-funded escrow for F_P. This increases the cost of mimicking, making it impossible for Type B to fake it. Moreover, a change in FTC/DOJ posture changes q_N and q_P. If q_N drops (regulatory risk for Netflix increases), the inequality $U_T(N) \geq U_T(P)$ becomes easier to satisfy, potentially flipping the winner without Paramount changing its bid. Additionally, the existence of the $1.08/share break-up fee B acts as a barrier to entry. If B were lower, the threshold for Paramount to prove "credibility" would be lower.

Limitations: First, we modeled T as a unitary actor. In reality, merger-arbitrage funds (risk neutral) and long-only pension funds (risk-averse) have different utility functions regarding q_P. Also, our model is a single-shot extensive form, while real M&A involves repeated tender offers and renegotiations. Moreover, q_N and q_P are treated as Nature's moves, but bidders actively influence these probabilities through lobbying and litigation.