

(Since this a new theory-based book, I concentrate on the theory itself and less on the empirical chapters.)

## INTRODUCTION

Puzzle: “Why would utility maximizers ever choose policies with less than the highest expected value?—people act suboptimally from the expected utility theory (EUT). PROSPECT THEORY (PT): 1) losses have a greater impact than do gains 2) the way the alternatives are presented can have a great influence on the choices people make.

## AN INTRODUCTION TO PROSPECT THEORY

PT posits that individuals evaluate outcomes with respect to deviations from a reference point rather than with respect to net asset levels (→ reference point a critical variable). EUT: probability of each outcome in risky situations is known; individuals weight the utilities of outcomes by the probabilities and choose the highest weighted term. Despite the domination, EUT is not empirically correct. Descriptive Foundations of PT: 1) People think about gains and losses around the *reference point* (RP; status quo, aspiration level, etc.) rather than net assets. 2) Individuals risk-averse wrt gains (concave) and risk-acceptant wrt losses (convex); *reflection effect* around the RP. 3) “Losses loom larger than gains.” Overvaluation of current possessions = *endowment effect*; symbolic value of political and/or economic assets strengthen this. 4) Identification of RP, *framing* of a problem, critical. People can accommodate to losses and gains (moving RP up or down) or renormalize RP. 5) Individuals overweight outcomes which are certain relative to outcomes only probable—*certainty effect*. Extremely likely treated as certain—*pseudocertainty effect*. 6) Individuals discard common elements in different choices, focus on the differences—*isolation effect (cancellation)*. PT Summary: 1) Editing phase: preliminary analysis of the choice problem. *coding*: identifying RP; *framing* outcomes; *simplification* of probabilities by rounding; *detection of dominance* to eliminate dominated alternatives; *combination* of probabilities for identical outcomes; *segregation* of riskless components; *cancellation*. 2) Evaluation phase: edited prospects are evaluated and the preferred one chosen. Value function:  $V = \sum w(p_i) * v(x_i)$ .  $p_i$  probability;  $w()$  probability weighting function;  $v()$  value function;  $x_i$  is outcome. Value function  $v(x_i)$ : defined on deviations from RP; concave for gains and convex for losses; steeper for losses than for gains. Probability-weighting function: measures the impact of the probability of an event on the desirability of a prospect; not a linear function of probability; not well-behaved at end points (sharp, indeterminate increase around  $w(0)=0$  and  $w(1)=1$ .; slope less than one except for the endpoint regions → small probabilities overweighted, larger probabilities underweighted.

## POLITICAL IMPLICATIONS OF LOSS AVERSION

Specter of losses activates great efforts that risk—and frequently lead to—greater losses, independent of the total value holdings. Loss aversion (LA) in political life may not be entirely psychological: domestic politics (being punished at the polls) or international politics (power-seeking politician) may explain. Losses may not scale in their international impact (differences in the size of loss may not differently affect reputation and credibility. Even if the leader’s behavior is explained politically, the domestic opinion may operate according to PT. General Effects of LA: Cover-ups would be more frequent than under unbiased estimates of costs and probabilities. People expected to persevere in losing ventures much longer than under standard rationality (Vietnam). The Ford administrations’ reaction to the possibility of a swine flue epidemic doesn’t quite fit the PT. Three factors: 1) people willing to accept an outcome if not seen as a loss but as expected payment for the activity. 2) politics as the driving force (not supporting the vaccination imprudent). 3) Once deaths from inoculations real, the program was called off. Effects on Bargaining, Deterrence, and Causes of War: Implications: 1) If LA is widespread, states defending the status quo have a big bargaining advantage (willing to pay higher price and run higher risks to avoid losing) → 2) deterrence is easier than compellence. 3) Conflicts and wars are more likely when each side believes it is defending the SQ (or believes it will suffer great losses by not fighting). 4) During the Cold War, a superpower’s threat to intervene in a local conflict was greater the more its local client was suffering. → LA gives a bargaining advantage to the side that fears or suffers losses, thus supports stability. War-Peace Decisions: If PT correct, we would expect that wars and conflicts would be more strongly and more commonly motivated by the desire to avoid perceived losses than by the hope of making gains. Restraints in a limited war is more likely to be broken by the side fearing significant losses. Methodological issues: states take risks in the first place, because they believe they will suffer losses; the other side of the coin (non-events), states are slow to take advantage of opportunities to expand at some risk. In some cases, RP is not SQ but something better → higher risk-taking (danger of tautology). Both sides can have different RPs and be simultaneously be impelled by loss aversion. The belief in inevitable progress (Soviets’) can produce a different and steadily changing RP. // 1) Decision-maker might risk escalation if doing so held out the possibility of reversing defeat. 2) When small war certain, decision-maker may risk larger war for a chance to escape unscathed. Renormalization: Problem of people taking high risks to reverse losses already suffered; their RP should renormalize. In IR, states renormalize for gains much more quickly that for losses. Implications for Social Efficiency and Stability: Endowment effect enhances social stability. But in IR, negotiations are inhibited since each side feels the cost of concession is greater than gain received from the concession by the other side. Compounded by the certainty effect of overestimating the likelihood of war (and thus the realization of disadvantage entailed in bargaining); states willing to pay more to reduce to probability to zero than to reduce the probability by the same amount on other ranges. Methodological Difficulties: Testing all the above things would be difficult!

## ROOSEVELT AND THE MUNICH CRISIS

Puzzle: During the initial phase on the Munich crisis in September 1938, Roosevelt thought that American intervention was inappropriate, but eventually, he changes his mind, becoming willing to accept two risks he had avoided before: ineffectiveness of intervention and the risk of a greater conflict; Why? Answer: The change is a consequence of a change in the way he represented the

**Barbara Farnham, editor, *Avoiding Losses/Taking Risks: Prospect Theory and International Conflict* (1994)**

crisis to himself, or framed it, rather than a response to new information about its implications for the U.S.. Method: Farnham traces Roosevelt's decision-making process and the inflow of information. She identifies that from the rational choice perspective, there were no changes in the risk of intervening sufficiently to justify the reversal of preferences, no changes on the probability side of the equation either. From PT perspective, after Godesberg, Roosevelt suddenly came to see the impending war in Europe as a loss for the U.S.. Farnham claims that FDR's increasing affect due to emotional communication shifted his frame so the RP was above the situation.

**THE IRANIAN HOSTAGE RESCUE MISSION**

Puzzle: Carter's attempt to rescue the hostages was completely contrary to his humanitarian emphasis in world politics and a highly risky prospect from a military standpoint; why did he do it? McDermott argues that the framing effect of the PT explains the anomaly. Method: She traces the opinions and policy suggestions of the three policy makers: Vance, Brzezinski, and Jordan. Among the options available, he took the gamble to avoid losses but ended up losing everything. Carter was in the domain of losses both domestically and internationally. There were five options: do nothing, diplomatic means, rescue mission, mine the harbors, all-out military attack. Vance framed the options in terms of mortality and opposed the rescue mission, using the Agnus Ward analogy. Brzezinski framed the options in terms of national power and prestige, as well as the hostages' welfare and supported the rescue mission, using the Israeli raid on Entebbe and Bay of Pigs as the analogies. Jordan framed the options in terms of their impact on the reelection campaign and supported the rescue mission. PT would say that Carter would choose the gamble that would restore the SQ. In addition, Carter was overconfident! Possible reasons: perceiving the whole probability as greater than the sum of partial probabilities; simple wishful thinking. This overconfidence led Carter to choose the risky option and dismiss Vance's concerns. As the decision-making for the rescue mission progressed, Carter's confidence increased (unfounded by CIA analysis, etc.). The mission failed (actually didn't even get fully implemented) and Carter lost.

**SOVIET POLICY TOWARDS SYRIA, 1966-1967**

Puzzle: In the middle of 1966, Soviets circulated incorrect info about Israeli troop concentrations on the Syrian border. Once the conflict started, the Soviets worked toward a cease-fire. Why did the Soviet leadership choose to risk war in the Middle East? Answer: Not based on EUT or unique Soviet experiences or ideological biases. The Soviets were risk acceptant to maintain the SQ in the Middle East. Because they sought to save Syria's neo-Baath government, they promoted war scare and helped to initiate the very war they had been warning against. The Soviets feared the collapse of the regime because of the certainty effect exaggerating the regime's internal instability and its vulnerability to Israel. Soviets' RP was the pro-Soviet Provisional Command in Syria, which led to the endowment effect. Soviets feared losing influence to either China or the U.S. → Soviets' SQ = Arab unity and an ideologically acceptable regime in Syria.

**THEORETICAL APPLICATIONS AND ANALYTICAL PROBLEMS**

Implications for IR: RP=SQ; LA+ Endowment Effect = SQ bias. Other explanations: 1) asymmetric interests favoring defender of SQ 2) reputation/domestic political costs for retreating from SQ. Reputation is a strong alternative explanation. LA would lead states to strike preemptively when it's against the EUT, to pursue failing policies for a long time. Leaders may be trying to pacify or distract domestic audience. Sometimes the fact of loss may mean more than the magnitude of loss. Framing related to relative deprivation. Endowment effect leads to "concession aversion." Frames can be manipulated by internal and external actors. Problems in Applying PT: PT comes from lab experiments. Problems of utilities, power, interval-level problem, random shocks, in real life. SQ continuously changing. Spurious variable affecting framing and behavior. In evaluating PT, it should be compared relative to EUT not absolutely. Focus on framing and probability assessments rather than abstract weighted utilities and look at trade-offs made. Sometimes difficult to tell whether preventive war or continued decline involves the greater risks. Observers need to be careful about small probabilities (certainty effect and overweighting). Overall, risk can be affected by idiosyncratic, cultural, political, or ideological variables.

**A PSYCHOLOGICAL PERSPECTIVE**

Principal Components of Decision: In PT, the decision-maker is the individual, not a group of individuals. Because decision choices need to be observed over time for preference ordering, problem exists in distinguishing change in framing and change in current situation. Consumption goods exhibit endowment effect, whereas induced value tokens do not. So, what about occupied lands, allies, newly situated missiles, etc.? PT limited to options with exactly known probabilities. Outside factors in politics: reputation, coalition formation, reciprocity, and power, compounded by ambiguous info, group deliberation, ulterior motives and social constraints.

**CONCLUSION**

Potential Areas of Application: 1) framing, value measurement and risk propensity 2) impact of those on bargaining and deterrence 3) implications for stability. Conceptual and Methodological Problems: 1) lab versus the world problem 2) problems of the political setting (risk, uncertainty, individual choice, group setting, etc.) 3) The analyst lacks information 4) Beating out alternative explanations, EUT/RCT