ABSTRACT OF THE THESIS

The Potential of Prospect Theory in Public Administration: Can it Help Explain California's Mandate on Zero Emission Vehicles?

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The state of California adopted the ZEV (zero emissions vehicle) mandate in 1990 while the real merits and feasibility of these vehicles were still unclear. This poses the question: - what induced California to make that high-risk decision?

For a number of reasons, the rational choice model seemed unsuitable as an explanation. Thus, prospect theory was chosen as the approach that adequately explains the choice of the ZEV mandate.

According to this theory, individuals tend to be risk averse with respect to gains and risk acceptant with respect to losses. Using the theory, four hypotheses were developed - (i) the passage of the ZEV mandate in California was triggered by an environmental and a political crisis, (ii) the prospect of gains in a domain of

losses made decision-makers accept immense risk in their choice of an advanced technology, (iii) government incentives to promote ZEVs focus attention on economic gains rather than on environmental benefits, and (iv) the socioeconomic characteristics of a state influences its interest in the advanced and expensive technology of ZEVs.

The first three hypotheses were tested using a qualitative approach. The fourth hypothesis was tested quantitatively. This hypothesis was tested using logistic regression and data on the socio-economic characteristics of states, with a finding that education and automobile registrations per household influence people's interests in ZEVs.

Analyses of the other three hypotheses have tentatively supported the utility of the prospect theory: it is capable of explaining the state's decision-making process. That is, from a reference point of air quality standards - a public good - decision-makers' perception of deep loss compelled them to adopt the ZEV mandate. They accepted immense risks because they considered it a remedy for the air quality problem and also as a potential generator of profitable technology. Further, the study suggests that greater weight has been given to monetary incentives, rather than promoting abstract environmental

benefits, in order to influence the decision-making processes of individuals.