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# Intertemporal choice experiments and large-stakes behavior<sup>★</sup>



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### ABSTRACT

Intertemporal choice experiments are increasingly implemented to make inference about discounting and marginal utility, yet little is known about the predictive power of resulting measures. This project links standard experimental choices to a consumption smoothing decision with large stakes — around 10% of annual income. In a sample of around 400 Guatemalan Conditional Cash Transfer recipients, we find that preferences over large-stakes payment plans are significantly correlated with experimental measures of patience and diminishing marginal utility. These represent the first findings in the literature on the predictive content of such experimentally elicited measures for a large-stakes decision.

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### 1. Introduction

Intertemporal choice is prevalent in economic decision making. Explicit characterization of structural discounting models has led to widely appreciated theoretical developments (Samuelson, 1937; Koopmans, 1960; Laibson, 1997; O'Donoghue and Rabin, 2001). Measurement of the broad forces of these models and corresponding utility parameters has received deserved empirical attention as well, with notable contributions in both laboratory and field settings.<sup>1</sup>

A prominent discussion related to the measurement of intertemporal preferences has developed in the last decade. Frederick et al. (2002) note a critical issue: the confounding effects of diminishing marginal utility for making inference on patience. A decision-maker who is indifferent between \$45 today and \$50 in one month can be arbitrarily impatient depending on changes in utility over this range.<sup>2</sup> Diminishing marginal utility confounds both quantitative and qualitative

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<sup>&</sup>lt;sup>1</sup> Examples include Hausman (1979), Lawrance (1991), Warner and Pleeter (2001), Harrison et al. (2002), Cagetti (2003), DellaVigna and Malmendier (2006), Laibson et al. (2007), Andersen et al. (2008), Mahajan and Tarozzi (2011), Andreoni and Sprenger (2012), Fang and Wang (2015).