Decomposing Present-value Effects: Evidence from a large-scale restructuring experiment

Abstract

Interest rate changes only have a small effect on borrower cash flows, but a substantially larger effect on the present-value (PV) of future obligations. We study these remote and elusive balance sheet effects of interest rates in the context of consumer debt restructuring. We design and implement a large scale debt relief program where we deliberately vary the interest rate, maturity and payment schedules. We find that simple redenominations of the same face-value have significant effects on the borrowers decision to whether and when to default. Although rate reductions have a smaller effect on current resources compared to temporary forbearance, and a comparable effect in terms of magnitude and persistence as maturity extensions, its efficacy in reducing defaults is substantially higher. We formulate a test of fungibility and decisively reject models where the decision to default depends solely on current flows. However, we also find strong evidence against models where resources are fungible, and find that a dollar change in current cash flows has a similar effect on defaults as a three dollar change in the present-value of future payments. From the perspective of the financial institution, offering either type of debt-relief decreases recovery, however balance sheet effects are sufficiently strong to make it an efficient way to incentive intermediaries.