

# Measuring Valuation of Liquidity with Penalized Withdrawals\*

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## Abstract

We propose to use penalized withdrawals from retirement savings accounts, identified from U.S. tax records spanning two decades, as a revealed-preference tool to characterize households' valuation of liquidity. We start by documenting several new facts on penalized withdrawals behavior which suggest they are used for self-insurance and motivate us to interpret the prevalence of penalized withdrawals as a symptom of high valuation of liquidity. Informed by a simple model, we then use penalized withdrawals as a tool to characterize American households' valuation of liquidity over time and space. We first show that households facing adverse economic shocks have sudden, and persistent, increases in their valuation of liquidity. We then document a large spatial variation in the valuation of liquidity, and we use a movers design to show that location plays an important role, explaining over 30% of the entire variation. Merging our data with socio-economic indicators by commuting zone, we find that households in black communities have a higher valuation of liquidity, suggesting that they may be marginalized from the credit market. Finally, we apply our tool to a study of the Great Recession and find that in areas more severely affected by the downturn, liquidity needs increased for all workers, consistent with a tightening of the local credit conditions. Overall, our analysis offers a new tool for assessing variation in the valuation of liquidity and for enriching social insurance policies to target both households and locations over time.

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