Tax Planning, Illiquidity, and Credit Risks: Evidence from DeFi Lending

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Abstract

This study examines the link between tax-planning-induced illiquidity and credit risks in lending markets. Exploiting an exogenous tax shock imposed on cryptocurrency gains and millions of transactions in Decentralized Finance (DeFi) lending, we document that tax-motivated borrowing strategies to defer capital gains taxes significantly reduce market liquidity. This effect is pronounced among individuals borrowing in stablecoins (a way to monetize returns), those with higher loan-to-value ratios (more risk-averse towards new regulations and typically with larger taxable gains), those with high returns in the underlying asset (representing larger taxable gains), and those holding locked-in assets for over a year (i.e., converting high short-term to lower long-term capital gains tax rates). Using instrumental variable analysis, we provide a plausibly causal relation between tax-planning-induced illiquidity and increased credit risks. A standard deviation increase in tax-induced illiquidity leads to a more than twofold increase in the value of defaulted loans. Our results remain robust across a battery of checks, including analyses of subsamples of highly tax-sensitive borrowers, and align with well-documented tax awareness periods. Overall, our insights are relevant to market participants, assist in estimating revenue losses for tax authorities, and inform emerging policies on the tax treatment of digital assets.

Keywords: DeFi lending, tax planning, illiquidity, credit risk, digital assets regulation.

JEL classification: G15, G18, G23, M41, M48, K22, K34.

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