The Myth of the Diversified Portfolio: Heterogeneous Returns and Asset Prices
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Abstract
I develop a methodology for estimating growth rates from repeated cross-sectional surveys and apply it to estimating historical growth rates of wealth. The method approximates wealth dynamics using a neural network and utilizes machine learning optimization techniques to match wealth distributions from the Survey of Consumer Finances. The estimated dynamics of wealth feature substantial time-varying heterogeneity in the growth rate of wealth. Consistent with the predictions of Constantinides Duffie (1996), I find that contemporaneous wealth volatility is positively correlated with market returns and can help to rationalize the equity premium using lower levels of risk aversion.