

Learning from the Consumption-Wealth Ratio*

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Abstract

We document statistically and economically significant portfolio gains for a Bayesian investor who manages the portfolio based on monthly financial predictors and the quarterly consumption-wealth ratio (CAY). We model the investor's belief revision by a constrained mixed-frequency particle learning algorithm, where sequential parameter learning, time-varying volatility, state latency, mixed-frequency predictors, and economic constraints are simultaneously incorporated. Both time-varying variance and CAY improve stock return predictability and enhance portfolio performance. Mixed-frequency predictive regressions with both features capture the volatility dynamics better than and economically outperform quarterly aggregate models. Our results highlight the economic gains from enriching monthly stochastic volatility models with lower-frequency macroeconomic predictors.

JEL Classification: C13, C32, C53.

Keywords: Consumption-wealth ratio, constrained mixed-frequency parameter learning, predictive regression, Bayesian portfolio management

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