

# Thin-Trading Bias in Beta $v$ Estimation Error: a Note<sup>\*</sup>

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Preliminary — comments very welcome

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### **Abstract**

Two regression coefficients often used in Finance, the Scholes-Williams (1977) quasi-multi-period "thin-trading" beta and the Hansen-Hodrick (1980) overlapping-periods regression coefficient, can both be written as instrumental-variables estimators. We check the performance of these IV -estimators and the validity of the t-tests in small and medium samples, gauge the robustness of the Scholes-Williams estimator outside its stated assumptions, and report performances relative to the standard OLS and the unit-beta model in a hedge-fund style application.

Keywords: Market Model, thin trading.

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