Equity Market Reactions to Initial Public Debt Offerings: A Bayesian Analysis

Rui Sun*

October 14, 2025

Abstract

This chapter examines how equity investors respond to a firm's first public debt offering ("Debt IPO"). We analyze stock price behavior around Debt IPO announcement periods. The Bayesian econometrics allows us to estimate abnormal returns and their uncertainty while incorporating information such as market conditions (e.g. S&P 500 returns, changes in the VIX) and firm characteristics (issue size, credit rating, industry). We find a statistically significant negative stock price reaction to corporate Debt IPO announcements. On average, equity holders experience a cumulative abnormal return of around –0.5% to –1% in the short event window, with losses mounting to several percent over a one-month Post-Debt IPO window. These negative abnormal returns remain robust after controlling for broader market movements and volatility, suggesting that the decline is driven by the issuance event itself rather than coincident market shocks. The evidence hints that investors view initial public debt offerings with caution, possibly interpreting them as signals of increased leverage or limited growth prospects. Our findings are consistent with prior research showing long run stock underperformance following Debt IPOs and mirror the negative market reactions observed for equity issuances. This chapter's contribution lies in demonstrating a Bayesian abnormal return analysis provides a fuller statistical characterization of announcement effects. The approach yields intuitive measures of credibility for abnormal returns and can flexibly accommodate various covariates and modeling assumptions, offering a nuanced understanding of how Debt IPOs influence shareholder wealth.

Keywords: Debt IPO; Stock market reaction; Corporate bonds; Bayesian econometrics

[1]City University of New York, Graduate Center and Baruch College. rsun2@gradcenter.cuny.edu. I am grateful to my advisors, Christos Giannikos, Jun "Jonathan" Wang, and Yochanan Shachmurove, for their guidance and insight. I also thank Theodore Joyce for his valuable advice and support. All errors are my own.