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WORKING PAPER

The Valuation of IPOs by Investment Banks and the Stock Market: Empirical Evidence

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Abstract

In this paper, pre-IPO value estimations by the lead underwriting investment bank of Belgian IPO stocks are compared to the offer price and the stock price in the first month of listing. The valuation methods used by the lead underwriter and the estimated values are often discussed in Belgian IPO-prospectuses. For 33 IPOs in the 1993-2000 period, we find that in all cases the lead underwriter uses several methods to estimate stock value. Discounted free cash flow, which is used to price all IPOs in the sample, is the most popular valuation method. The IPO offer price is mainly driven by the dividend discount model if applied. However, we find that the dividend discount model is not better in predicting the stock price than other valuation models. Moreover, our results suggest that the dividend discount model tends to underestimate value, while discounted free cash flow produces unbiased results. This indicates that underwriters consciously underprice the IPO by relying on a valuation method that tends to underestimate value. We also find that price/earnings and price/cash flow multiples using forecasted earnings and cash flows for the year after the IPO lead to more accurate valuations than multiples using forecasted earnings and cash flows for the IPO-year. Finally, our results indicate that the offer price is closer to the stock price after listing than individual valuation estimates, although the differences are not statistically significant.