

# Why and When to Go Public : Evidence from Structural Estimation

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## Abstract

Going public is an important milestone for a firm. There are significant benefits and costs associated with the decision of being listed. The IPO proceeds may help acquire new capital for investment and firm growth. IPO benefits may also include transfer of risk, relax the borrowing constraints. However going public is associated with significant amount of fixed and variable costs. The process and the uncertainty associated with raising equity are further complicated by the adverse selection problem associated with yet to be publicly observed innovations of the firm. The firm need to underprice the issue to give investors enough incentives to invest in the IPO. This is an indirect cost and lowers the IPO proceeds and adds to the listing cost. Facing these trade-offs the firm manger would want to time the IPO decision well which makes the decision process inherently dynamic in nature. In this paper we formulate a dynamic programming based structural model of the going public decision and estimate the hidden parameters using data from Indian IPOs. The model predicts underpricing and hot issues markets as observed as recurrent phenomenon worldwide. The reduced form estimation suggests past performances, age, risk factors listed in the IPO prospectus significantly affects the going public decision. A matching estimation suggests that firms who do not go public probably because of high associated costs loose out in higher profitability and sales. The average treatment effect suggests that firms could have increased their annual profit after tax by about 22.4 crores of rupees. We estimate the structural parameters of the costs associated with going public and conduct counterfactual experiments.

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