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Chapter 7.3.4

Security flipping

Inducing trading in the security

- Investment banks do not only earn underwriting fees, but also benefit from trading the security
- Many investors allocated the security will trade through the investment bank, earning them brokerage commission
- Investment banks have an incentive to induce more trading and earn additional revenue

Excess demand

- Assume that an issue is underpriced and the demand is Q, while the number of securities issued is $\hat{Q} < Q$
- Rationing is required and a fraction $\gamma = \frac{\hat{Q}}{Q}$ is allocated, the unmet demand is $(1-\gamma)\,\hat{Q}$
- The number of securities issued, $\hat{Q}$, is also the demand in equilibrium at price S^*

Investment bank profits

- Investment banks charge an underwriting fee on the proceeds of the issue and a brokerage fee on any trading activity
- Profits: $\Pi_B = fS\hat{Q} + \hat{f}(1-\gamma)\,\hat{Q}S^*$
- The demand for security allocation is sensitive to the to the offer price and has elasticity $\eta = \frac{\partial Q}{\partial S}\frac{S}{Q} < 0$
- The optimal offer price is maximizes investment bank profits, $\frac{\partial \Pi_B}{\partial S} = 0$, which solves for $S = -\frac{\gamma \hat{f} \eta}{f} S^*$

Underpricing

- We have underpricing if $S < S^*$, or $-\frac{\gamma\lambda\eta}{f} < 1$, or $\eta > -\frac{f}{\gamma\hat{f}}$
- If the elasticity is sufficiently small (in absolute terms), issues are underpriced
- The investment bank balances the lower income from the underwriting fee against the brokerage income
- A small elasticity ensures that the trading demand for the security is not reduced too much as the price increases to its equilibrium, offsetting the loss in underwriting fees

Summary

- Investment banks will underprice issues to generate demand from traders not allocated the security but valuing it above the offer price
- Those allocated the security will include some who value it below the equilibrium price and sell
- This trading generates additional revenue for the investment bank, at the expense of the issuer receiving lower proceeds

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