Measuring the Relative Marginal Cost of Debt and Capital for Banks

Summary of Presentation

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The implicit assumption for the existence of an optimal capital structure is that the cost of capital depends on the degree of leverage and that there exists sufficient friction that prevents investors from taking advantage of arbitrage opportunities. By exploiting the equilibrium condition under an optimal capital structure—that a bank's cost of funds either from equity or debt should be equal—we derive a measure of capital bindingness. This measure suggests that, since 1993, the cost of equity capital has been very expensive relative to the cost of debt by historical standards, yet banks have not lowered their capital ratios as theory would predict.

This finding seems to indicate that banks are somehow "constrained" to holding a higher fraction of their liabilities in the form of more expensive equity capital instead of the relatively cheaper debt. Perhaps the reason that banks are constrained from lowering their capital ratios has less to do with regulatory capital requirements than the banks' inability to effectively reduce excess capital. Recent data show that banks are growing more slowly today than in the past, which would preclude increasing debt as a means of lowering the capital ratios. Empirical data suggest that banks may be attempting to reduce equity through consolidation and stock repurchases. Some may view stock repurchases as costly compared with mergers and acquisitions, but our work suggests that both methods will lower capital ratios and bring the marginal cost of debt and equity closer together.

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