Municipal bond insurance, capital regulation and optimal bank interest margin: an option-based optimization

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Abstract

Nanda and Singh (2004) explained why municipal bonds are often issued with prepackaged insurance. We further propose an option-based model that examines the relationships among municipal bonds issued with prepackaged insurance, capital insurance, and optimal bank interest margins. Under the negative(positive) elasticity effect, both the optimal loan and deposit rates are positively related to the cost of the municipal bond insurance (the capital regulation). We argue that municipal bond insurance and capital regulation can add/deduct the optimal bank interest margins (and thus bank profits). Our findings provide alternative explanations for the theoretical evidence concerning bond insurance behavior.

Keywords: Municipal bond insurance, capital-to-deposits ratio, bank interest margins.

I. Introduction

Nanda and Singh (2004) presented several statistics that illustrate some of the changes in the municipal bond market. A major development is the much more significant growth in insurance for municipal bonds, in which a third-party insurer promises to step in and make timely payments to the bondholder in the event of a default, even though defaults

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