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On the pricing of GDP-linked financial products

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Abstract

This paper discusses the pricing of GDP-linked financial products. GDP-linked bonds for instance are bonds which pay a coupon tied to the changes of GDP (Gross Domestic Product): if economic growth is low, the coupon decreases while a strong economic rise leads to a higher coupon. Therefore these innovative financial instruments are able to translate changes in the business cycle and long-term prospects into changes in the issuing country's debt service, taking into account GDP development. Against the background of a growing interest in macro-indexed financial instruments and Argentinas very recent offer to issue GDP-linked bonds, different characteristics of GDP-linked bonds are briefly discussed and a simple pricing approach for GDP-linked bonds and European options on GDP development is provided assuming a Black–Scholes type environment.

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Notes

[1] Further details on these interviews and a more detailed discussion on suitable characteristics can be found in Schröder et al. (2004).

[2] Both examinations are conducted using data from the interest rate and bond database of the Chair of Finance at the University of Mannheim. A detailed description of the analysis of performance and cash flow sensitivities of GDP-linked bonds in general, as well as of a quantitative in-depth comparison between the prices of straight bonds and the derived prices of GDP-linked bonds can be found in Schröder et al. (2004).