

# Interpreting the Term Structure of Interbank Rates in Hong Kong

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## Summary

This paper studies monthly data spanning 1992:01-2001:02 on the term structure of short-term interbank rates in Hong Kong. The purpose of the analysis is to assess to what extent the term structure contains information about the future path of short-term interest rates. We characterise the evolution over time of short-term interest rates and term spreads. As a prelude to the econometric analysis, we use principal component analysis to explore informally the number of different factors influencing the term structure and test for unit roots in the different interest rates and term spreads. We go on to test whether the data obey the Expectations Hypothesis (EH) of the term structure, that is, whether we can reject the hypothesis that term premia are constant over time and longer-term interest rates are determined solely by the expected future path of short-term rates. We show that the data reject soundly this hypothesis and conclude that time-varying term premia are present. Indeed, we find that there appears to be no information about the future path of interest rates embedded in the term spreads. In light of this, we incorporate time-varying term premia in the econometric analysis. Our proxy for the term premia is highly significant in the different regressions, and we find strong evidence that interest rate spreads are informative for the future path of short-term rates. Nevertheless, the EH is rejected by the data. However, since the econometric estimates of the term premia are subject to error, these regressions are subject to errors-in-variables bias of unknown magnitude. We therefore re-estimate the equations using an instrumental variables technique to overcome the errors-in-variables problem. In the final estimates the risk premia remain highly significant. More importantly, we can reject the hypothesis that the slope parameters are zero, but are unable to reject the hypothesis that they are unity as suggested by theory. Overall, the results suggest that the term structure of interbank rates in Hong Kong can be thought of as being driven by expectations of future short-term rates and a term premium that is related to the volatility of the one-month rate.