

## Yield Curve Risk in Japanese Government Bond Markets

Kenneth J. Singleton

First published: 17 February 2003

<https://doi.org/10.1111/1468-2443.00007>



### Abstract

This paper characterizes the nature of yield curve risk in the Japanese government bond (JGB) market, and explores the effectiveness of risk management based on a linear factor representation of yield curve risk. The implied optimal hedges against factor risk are related to duration-based hedging strategies, which are shown in many cases to be substantially sub-optimal. In addition, the drift over time in optimal hedge ratios due to the local nature of optimal hedging is investigated. The results show substantial drift especially for the weights on the factor representing the risk of a changing slope of the JGB yield curve. Though our focus is on government bond markets, the findings have implications for risk management for most interest-sensitive instruments, especially those that are priced relative to government bonds (e.g. corporate bonds).

### Citing Literature



[Download PDF](#)

#### ABOUT WILEY ONLINE LIBRARY

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. [Privacy Policy](#)



Manage Preferences

Accept All

Reject Non-Essential

Contact Us  
Training and Support  
DMCA & Reporting Piracy  
Sitemap

#### OPPORTUNITIES

Subscription Agents  
Advertisers & Corporate Partners

#### CONNECT WITH WILEY

The Wiley Network  
Wiley Press Room

Copyright © 1999-2026 John Wiley & Sons, Inc or related companies. All rights reserved, including rights for text and data mining and training of artificial intelligence technologies or similar technologies.

**WILEY**

This website utilizes technologies such as cookies to enable essential site functionality, as well as for analytics, personalization, and targeted advertising. You may change your settings at any time or accept the default settings. You may close this banner to continue with only essential cookies. [Privacy Policy](#)



**Manage Preferences**

**Accept All**

**Reject Non-Essential**