# $\mathbb{C}$

### CAMBRIDGE ASSOCIATES LLC

# EUROPEAN MARKET COMMENT ULTRA-LONG GILTS—TOO, TOO DEAR November 2005

Robert Lang Ann-Marie Hofer

Copyright © 2005 by Cambridge Associates LLC. All rights reserved.

This report may not be displayed, reproduced, distributed, transmitted, or used to create derivative works in any form, in whole or in portion, by any means, without written permission from Cambridge Associates LLC ("CA"). Copying of this publication is a violation of federal copyright laws (17 U.S.C. 101 et seg.). Violators of this copyright may be subject to liability for substantial monetary damages. The information and material published in this report are confidential and non-transferable. This means that authorized members may not disclose any information or material derived from this report to third parties, or use information or material from this report, without prior written authorization. An authorized member may disclose information or material from this report to its staff, trustees, or Investment Committee with the understanding that these individuals will treat it confidentially. Additionally, information from this report may be disclosed if disclosure is required by law or court order, but members are required to provide notice to CA reasonably in advance of such disclosure. This report is provided for informational purposes only. It is not intended to constitute an offer of securities of any of the issuers that are described in the report. This report is provided only to persons that CA believes to be "Accredited Investors" as that term is defined in Regulation D under the Securities Act of 1933. When applicable, investors should completely review all Fund offering materials before considering an investment. No part of this report is intended as a recommendation of any firm or any security. Factual information contained herein about investment firms and their returns which has not been independently verified has generally been collected from the firms themselves through the mail. CA can neither assure nor accept responsibility for accuracy, but substantial legal liability may apply to misrepresentations of results delivered through the mail. The CA manager universe statistics, including medians, are derived from CA's proprietary database covering investment managers. These universe statistics and rankings exclude managers that exclude cash from their reported total returns, and for calculations including any years from 1998 to the present, those managers with less than \$50 million in product assets. Returns for inactive (discontinued) managers are included if performance is available for the entire period measured. Performance results are generally gross of investment management fees. CA does not necessarily endorse or recommend the managers in this universe.

Cambridge Associates LLC is a Massachusetts limited liability company headquartered in Boston, MA with branch offices in Washington, DC and Menlo Park, CA. Cambridge Associates Limited is a Massachusetts limited liability company headquartered in Boston, MA and registered in England and Wales (No. FC022523, Branch No. BR005540). Cambridge Associates Limited also is registered to conduct business in Sydney, Australia (ARBD 109 366 654). Cambridge Associates Asia Pte Ltd is a Singapore corporation (Registration No. 200101063G).

## Ultra-Long Gilts Too, Too Dear

U.K. investors have been voraciously gobbling up 50-year gilts in recent weeks. Yields on 50-year conventional gilts have fallen below 4.0%, while those on 50-year linkers have slipped below 1.0%. In fact, Morgan Stanley estimates that real long-term interest rates are at their lowest levels since gilts were first issued at the end of the 17th century.

Most demand has come from pensions, insurers, and investors who need to match their liabilities (falling real yields this year have actually increased this burden). Regulatory pressure has intensified the demand for duration, which is widely expected to remain quite strong. There is a generally perceived shortage of duration in Europe's fixed income market, and the mounting urgency among many investors to match liabilities may ensure the bonds remains well bid.

These buyers have driven up prices on ultra-long bonds to levels that make them unattractive for investors who do *not* need to match liabilities. Linkers are even less attractive than nominal gilts. Fifty-year linkers are expensive relative to nominal bonds of comparable maturity. As of November 28, the 50-year inflation-indexed offered a yield of 0.90%, while the recently issued 50-year nominal bond yielded 3.99%. The breakeven inflation point, therefore, is 3.09%, meaning that 50-year linkers will outperform nominal gilts if the average annual inflation rate exceeds 3.09% over the next 50 years.<sup>1</sup>

In the context of the United Kingdom's long-term experience with inflation, betting that annual inflation will exceed 3.09% seems compelling indeed. Over rolling 30-year periods since 1957, U.K. RPI has been at least double 3.09% in every period (out of 19), while the average annual inflation rate was 6.1%.<sup>2</sup> The peak inflation years occurred during 1973-81 when it averaged 15.0%, topping out at 24.9% in 1975. Inflation has averaged only 2.48% during the most recent seven-year period; an achievement widely attributed to the Bank of England's gaining of independence in 1998. In the post-1998 context, 3.09% annual inflation seems rather high.

If they were not so expensive, ultra-long gilts would offer a few attractive benefits to investors who do *not* explicitly engage in asset-liability matching and who manage their own bond portfolio. Long-dated nominal gilts offer a way to extend duration with a smaller allocation to bonds, while maintaining a constant degree of portfolio protection in the event of a prolonged economic contraction or outright deflation. Table A illustrates the relationship between duration, convexity, yields, and maturity. Both duration and convexity increase with maturity, and decrease as yields and coupons increase; when yields are low, as they are today, duration across maturities differs substantially, and as yields rise, duration and convexity converges, but material differences persist until yields hit double digits. Despite offering the potential to reduce a portfolio's overall bond allocation, however, ultra-long gilts come with considerable risk. While their extremely high duration and convexity present the opportunity for substantial market value gains if rates fall, it also offers the potential for considerable losses if rates rise.

<sup>&</sup>lt;sup>1</sup> This of course assumes that coupons will be reinvested at current yields.

<sup>&</sup>lt;sup>2</sup> Because inflation data begin in 1957, we cannot calculate the average inflation rate over rolling 50-year periods.

#### Table A

#### CHANGES IN DURATION DIMINISH WITH MATURITY AND INTEREST RATES

#### Duration of a 20-, 30- and 50-Year Par Bond at Various Yields

#### As of 30 September 2005



Sources: Barclays and The Bloomberg.