An Explanation of Negative Swap Spreads: *
Demand for Duration from Underfunded Pension Plans

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Abstract

The 30-year U.S. swap spreads have been negative since September 2008. We offer an explanation for this persistent anomaly. Through an illustrative model, we show that underfunded pension plans optimally use swaps for duration hedging, which can drive swap spreads to become negative. Empirically, we construct a measure of the aggregate funding status of Defined Benefits pension plans from the Federal Reserve's financial accounts of the United States and show that this measure is a significant explanatory variable of 30-year swap spreads. We find a similar link between pension funds' underfunding and swap spreads for Japan and the Netherlands.

Speaker Profile:

Suresh Sundaresan is the Chase Manhattan Bank Foundation Professor of Financial Institutions at Columbia University. He has published in the areas of Treasury auctions, bidding, default risk, habit formation, term structure of interest rates, asset pricing, investment theory, pension asset allocation, swaps, options, forwards, futures, fixed-income securities markets and risk management. His research papers have appeared in major journals such as the Journal of Finance, Review of Financial Studies, Journal of Business, Journal of Financial and Quantitative Analysis, European Economic Review, Journal of Banking and Finance, Journal of Political Economy, etc. He has also contributed articles in Financial Times, and World Bank Conferences. He is an associate editor of Journal of Finance and Review of Derivatives Research. At Columbia University, he is responsible for teaching two MBA elective courses: Debt Markets, and Advanced Derivatives. He has trained MBA and PhD students, who currently serve on the faculty at universities in the United States and abroad as well as in senior positions in major investment banks around the world.