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Retail Financial Innovation and Stock Market Dynamics: The Case of Target Date Funds

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ABSTRACT

Target date funds (TDFs) are designed to provide unsophisticated or investors with age-appropriate exposures to different asset classes like bonds. The rise of TDFs has moved a significant share of retirement macrocontrarian strategies that sell stocks after relatively good stock returns, stabilizing their funding, and reduces stock returns for TDFs held by these funds when stock market returns are relatively high. Growth in TDFs and similar investment products may dampen and increase the transmission of shocks across asset classes.

LAST TWO DECADES, one of the most significant trends in the financial American retail investment industry has been the rapid growth of target date funds (TDFs), also called pension funds. The number of TDFs has increased from a few in the late 1990s to over 100 today, and the number of assets under management has grown from less than \$1 billion to over \$1 trillion.

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2024 winning submission

“Retail Financial Innovation and Stock Market Dynamics: The Case of Target Date Funds”

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To maintain the target share of their portfolio in stocks, Target Date Funds (TDFs) employ a macro-contrarian strategy—selling stocks when the market does well, and buying when it does poorly. This paper shows that TDF trading activity helps stabilize stock prices and may dampen overall market volatility.

“The past two decades have seen a dramatic rise in TDF holdings within retirement plans. While earlier research has focused on benefits to individual investors, the authors advance the literature by analyzing TDFs’ effects on asset markets. The results are relevant for academics, practitioners and policymakers alike,” said Jonathan Reuter, one of the judges.

“The Samuelson Award is a particular honor for us, given our MIT ties. This recognition highlights both the real-world impact of academic work on optimal portfolios, like Samuelson (1969), and the importance of the design of retirement plans and financial innovations like TDFs for investors and asset markets,” said the authors.



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Adam Leive, University of California, Berkeley, “Health Insurance Design Meets Saving Incentives: Consumer Responses to Complex Contracts” (*American Economic Journal: Applied Economics*, 2022)

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2016

Felix Reichling, Congressional Budget Office; Kent Smetters, The Wharton School of the University of Pennsylvania, “Optimal Annuitization with Stochastic Mortality and Correlated Medical Costs” (*The American Economic Review*, 2015)

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2014

C. Eugene Steuerle, Richard B. Fisher Chair, Urban Institute, *Dead Men Ruling: How to Restore Fiscal Freedom and Rescue Our Future* (The Century Foundation Press, 2014)

2013

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2012

Sylvester J. Schieber, Former Chair, Social Security Advisory Board, *The Predictable Surprise: The Unraveling of the U.S. Retirement System* (Oxford University Press, 2012)

2011

James J. Choi, Yale School of Management; David I. Laibson, Harvard University, Department of Economics; Brigitte C. Madrian, Harvard University, John F. Kennedy School of Government, “Why Does the Law of One Price Fail? An Experiment on Index Mutual Funds” (*Review of Financial Studies*, 2010)

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Carmen M. Reinhart, Peterson Institute for International Economics, Washington, D.C.; Kenneth S. Rogoff, Harvard University, *This Time is Different—Eight Centuries of Financial Folly* (Princeton University Press, 2009)

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George A. Akerlof, University of California, Berkeley; Robert J. Shiller, Yale University, *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism* (Princeton University Press, 2009)

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Jeffrey R. Brown, University of Illinois at Urbana-Champaign; Amy Finkelstein, Massachusetts Institute of Technology, “The Interaction of Public and Private Insurance: Medicaid and the Long-Term Care Insurance Market” (*American Economic Review*, 2008)

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John Karl Scholz, University of Wisconsin–Madison; Ananth Seshadri, University of Wisconsin–Madison; Surachai Khitatrakun, The Urban Institute, “Are Americans Saving ‘Optimally’ for Retirement?” (*Journal of Political Economy*, 2006)

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Jonathan B. Berk, University of California, Berkeley; Richard C. Green, Carnegie Mellon University, “Mutual Fund Flows and Performance in Rational Markets” (*Journal of Political Economy*, 2004)

2004

Chester Spatt, Carnegie Mellon University; Robert Dammon, Carnegie Mellon University; Harold Zhang, University of Texas at Dallas, “Optimal Asset Location and Allocation with Taxable and Tax-deferred Investments” (*Journal of Finance*, 2004)

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Peter A. Diamond, Massachusetts Institute of Technology, *Taxation, Incomplete Markets, and Social Security* (Brookings Institution Press, 2002)

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John Cochrane, University of Chicago, *Asset Pricing* (Princeton University Press, 2001)

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Nicholas Barberis, University of Chicago, “Investing for the Long Run When Returns Are Predictable” (*Journal of Finance*, 2000)

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1. As of July 21, 2022. Based on data in PLANSPONSOR's 403(b) 2022 DC Recordkeeping Survey, combined 457 and 403(b) data.
2. As of June 30, 2024 assets under management across Nuveen Investments affiliates and TIAA investment management teams are \$1,349 billion.

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