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Research Update

Research and Market Analysis Group www.newyorkfed.org/rmaghome

The Bid-Ask Spread Offers a Useful Gauge of Treasury Market Liquidity

The bid-ask spread—the difference between bid and offer prices—is a good tool for assessing and tracking the liquidity of U.S. Treasury securities, according to a new article in the *Economic Policy Review* (vol. 9, no. 3).

In "Measuring Treasury Market Liquidity," Michael J. Fleming estimates and evaluates a comprehensive set of liquidity measures for the U.S. Treasury market. Recently available high-frequency data, he observes, now enable researchers to assess and track liquidity more effectively using such measures as the bid-ask spread, quote size, and trade size.

Because of their vast liquidity, Treasuries are important for a range of market-related trading and analytical activities. Market participants, for example, use Treasuries to hedge positions in other fixed-income securities and speculate on interest rates because they can buy and sell Treasuries quickly and with low transaction costs. The high volume of trading and narrow bid-ask spreads also make Treasury rates reliable reference rates for pricing and analyzing other securities.

Fleming finds that the commonly used bid-ask spread serves as a sound measure of liquidity. The spread is easy to understand, can be calculated quickly using real-time data, and correlates with a more sophisticated price impact measure and with episodes of reported poor market liquidity.

Conversely, quote size and trade size are only modestly useful tools for measuring liquidity: they correlate less strongly with episodes of poor liquidity and with the bid-ask spread and price impact measure. Trading volume and trading frequency—two other measures—emerge as weak proxies for liquidity, as both high and low levels of trading activity are associated with periods of poor liquidity.

New Research: July-September 2003

Structural Change Helps Explain Stalled Growth in Jobs

While output has grown steadily during the U.S. expansion that began in November 2001, employment has shown no signs of recovery. In a new study ("Has Structural Change Contributed to a Jobless Recovery?" *Current Issues in Economics and Finance*, vol. 9, no. 8), Erica Groshen and Simon Potter argue that the failure of employment to rebound may reflect an unusually high concentration of structural changes—permanent shifts in the distribution of workers throughout the economy.

Noting that all recessions combine structural and cyclical adjustments, the authors present evidence that structural changes predominated in the 2001 recession while cyclical changes—"reversible responses to lulls in demand"—lost importance. First, the authors' review of layoff trends during the last six recessions reveals that temporary layoffs helped drive the rise and fall of unemployment before 1990 but played only a small role during the 2001 recession. Permanent job losses accounted for most of the movement in the unemployment rate in 2001.

Second, a look at job flows in major U.S. industries during and after recessions suggests that before 1990, job losses (and gains) were quickly reversed once the economy began to recover. In 2001-02, by contrast, most industries that lost jobs during the recession continued to shed them during the recovery, and those industries that added jobs made further gains. The pattern that emerges, the authors note, is "one in which jobs are relocated from some industries to others, not reclaimed by the same industries that had lost them earlier."

According to Groshen and Potter, this shift toward new positions in different industries helps explain why the payroll numbers have been so slow to rise: Firms require more time to establish and fill new jobs than to recall workers to their old positions. The authors note, moreover, that in the current environment of financial market weakness and economic uncertainty, "firms may hesitate to create new jobs because of the risks involved in expanding their businesses or undertaking new ventures."

Publications and Papers

The Research and Market Analysis Group produces a wide range of publications:

- *The Economic Policy Review*—a policy-oriented journal focusing on economic and financial market issues.
- *Current Issues in Economics and Finance*—concise studies of topical economic and financial issues.
- *Second District Highlights*—a regional supplement to *Current Issues*.
- *Staff Reports*—technical papers intended for publication in leading economic and finance journals, available only online.
- *Publications and Other Research*—an annual catalogue of the Group's research output.

New Titles in the *Staff Reports* Series

The following *Staff Reports* are available at **www.newyorkfed.org/rmaghome**.

Macroeconomics and Growth

No. 171, August 2003
An Investigation of the Gains from Commitment in Monetary Policy
Ernst Schaumburg and Andrea Tambalotti

This study proposes a simple framework for analyzing a continuum of monetary policy rules characterized by differing degrees of credibility, in which commitment and discretion become special cases of what the authors call quasi commitment. The monetary policy authority is assumed to formulate optimal commitment plans, to be tempted to renege on them, and to succumb to this temptation with a constant exogenous probability known to the private sector. By interpreting this probability as a continuous measure of the (lack of) credibility of the monetary policy authority, the authors investigate the welfare effect of a marginal increase in credibility. Their main finding is that in a simple model of the monetary transmission mechanism, most of the gains from commitment accrue at relatively low levels of credibility.

International

No. 172, September 2003
Tariffs and the Great Depression Revisited
Mario J. Crucini and James Kahn

Drawing on recent business cycle research on the Great Depression, the authors return to an argument they advanced in a 1996 *Journal of Monetary Economics* article: Features of the Hawley-Smoot tariffs could have done more to decrease economic activity than is customarily believed, although not enough to account for the severe decline of the early 1930s. In this study, the authors reformulate their argument in a business cycle accounting framework that apportions fluctuations between three types of “wedges”: (productive) inefficiency, the consumption-leisure margin, and intertemporal inefficiency. Tariff increases in their model correspond primarily to productive inefficiency in a prototype one-sector model. Moreover, the wedge implied by tariffs during the Depression correlates well with the overall measure of productive inefficiency. By failing to produce a labor wedge of any consequence, their model offers persuasive evidence that factors other than tariffs also contributed significantly to the severity of the Depression.

Banking and Finance

No. 170, July 2003
Stock Market Reaction to Financial Statement Certification by Bank Holding Company CEOs
Beverly J. Hirtle

In 2002, the SEC mandated that CEOs of large, publicly traded firms certify the accuracy of their financial statements. This paper investigates whether certification has had a measurable effect on the stock market valuation of the forty-two BHCs subject to the order. It finds that the firms had a positive average abnormal return of 30 to 60 basis points on certification day—a result driven primarily by BHCs that certified in advance of the SEC’s deadline. Characteristics associated with greater opaqueness are systematically associated with these certification-day abnormal returns. In addition, average abnormal returns for not-yet-certifying BHCs were positive, though not statistically significant, on the day the first two BHCs certified, lending weak support to the idea that early certification may have signaled to investors that other BHCs were likely to certify. These results suggest that the certification requirement provided relevant information to investors and was thus an effective public policy tool, at least in the banking sector.

Papers Presented by Economists in the Research and Market Analysis Group

"Cross-Country Differences in Monetary Policy Execution and Money Market Rates' Volatility," *Leonardo Bartolini*. Bank of Finland, Helsinki, Finland, June 12.

"Identifying the Effect of Exchange Rate Volatility on Trade," *Christian Broda*. NBER conference, Cambridge, Massachusetts, August 5. With John Romalis.

"Exchange Rate Regimes and National Price Levels," *Christian Broda*. International Monetary Fund conference, Washington, D.C., September 15. Also presented at Universidad Di Tella, Buenos Aires, Argentina, September 19.

"Overview of the International Wage Flexibility Project," *Erica Groshen*. Conference on the Comparative Analysis of Enterprise (Micro) Data, Cass School of Business and National Statistics, London, England, September 17. With William Dickens.

"Tight Clothing: How the Multi-Fiber Arrangement Affects Asian Apparel Exports," *James Harrigan*. NBER conference, Taipei, Taiwan, September 5.

"Distance, Time, and Specialization," *James Harrigan*. Bank of Japan, Tokyo, Japan, September 9.

"How Important Are Technology Shocks for Business Cycles?" *James Kahn*. Economics Department seminar, Johns Hopkins University, Baltimore, Maryland, September 9.

"Do Business Cycles Really Have Permanent Effects?" *James Kahn and Robert Rich*. NBER conference, Cambridge, Massachusetts, July 24. Also presented at a Society for Economic Dynamics conference, Paris, France, June 6.

"Monetary Policy and Stock Prices," *Kenneth Kuttner*. NBER conference, Cambridge, Massachusetts, July 16. Also presented at a Business Economists conference, Lexington, Massachusetts, July 17.

"The U.S. and Japanese Economies," *Kenneth Kuttner*. Center on Japanese Economy and Business seminar, Columbia Business School, New York City, August 1.

"Inventory Dynamics and Business Cycles: What Has Changed?" *Jonathan McCarthy*. Western Economic Association International conference, Denver, Colorado, July 17. With Egon Zakrajšek.

"Capital Overhangs: Has Investment Spending Suffered from a Hangover?" *Jonathan McCarthy*. National Association for Business Economics Annual Meeting, Atlanta, Georgia, September 15.

"Financial Reporting and Governance," *Hamid Mehran*. London Business School, London, England, July 4.

"The Simple Geometry of the New Open-Economy Macroeconomics," *Paolo Pesenti*. Invited lecture at Middle East Technical University, International Conference in Economics VII, Ankara, Turkey, September 9.

"Nonlinear Model of the Business Cycle," *Simon Potter*. NBER conference, Cambridge, Massachusetts, July 16.

"Why Firm Access to the Bond Market Varies over the Business Cycle: A Theory and Some Evidence," *João Santos*. Centre de Recerca en Economia Internacional, Centre for Economic Policy Research, and *Journal of Financial Intermediation* conference, Barcelona, Spain, July 11.

"Modeling Regional Interdependencies Using a Global Vector Error-Correcting Macroeconometric Model," *Til Schuermann*. American Statistical Association and *Journal of Business and Economic Statistics* conference, San Francisco, California, August 5. With M. Hashem Pesaran and Scott M. Weiner.

"Playing for Keeps: Pay and Performance in the NBA," *Kevin Stiroh*. NBER Summer Institute, Cambridge, Massachusetts, July 21.

"Reassessing the Role of IT in the Production Function: A Meta-Analysis," *Kevin Stiroh*. NBER and Centre de Recherche en Economie et Statistique conference, Paris, France, September 4.

"Optimal Monetary Policy and Productivity Growth," *Andrea Tambalotti*. Eighteenth Annual Congress of the European Economic Association, Stockholm, Sweden, August 20.

"A Simple Explanation of the Border Effect," *Kei-Mu Yi*. Dartmouth College seminar, Hanover, New Hampshire, August 1.

Other New Publications

- "Residential Foreclosures in the City of Buffalo, 1990-2000." This comprehensive study by the New York Fed's Buffalo Branch examines the rise in foreclosures, the characteristics of the neighborhoods in which foreclosures occurred, and the nature of foreclosed loans in Buffalo and in a number of the city's communities.

- ***The Regional Economy of Upstate New York***. This quarterly newsletter, produced by the New York Fed's Buffalo Branch, focuses on issues of importance to upstate New York. The summer 2003 issue examines the composition of the upstate New York economy under the new North American Industry Classification System. The system categorizes industries according to how their products are made, rather than what goods they produce.

Find both publications at **www.newyorkfed.org/aboutthefed/buffalo_branch.html**.

Recently Published

Arturo Estrella and Anthony Rodrigues. 2003. "How Stable Is the Predictive Power of the Yield Curve? Evidence from Germany and the United States," with Sebastian Schich. ***Review of Economics and Statistics*** 85, no. 3 (August).

James Harrigan. 2003. "Specialization and the Volume of Trade: Do the Data Obey the Laws?" In E. Kwan Choi and James Harrigan, eds., ***Handbook of International Trade***. Oxford: Blackwell.

Bart Hobijn. 2003. "Another View of Investment: Forty Years Later," with Jess Benhabib. In Philippe Aghion, Roman Frydman, Joseph Stiglitz, and Michael Woodford, eds., ***Knowledge, Information, and Expectations in Modern Macroeconomics: In Honor of Edmund S. Phelps***. Princeton, N.J.: Princeton University Press.

Paolo Pesenti. 2003. "Monetary Rules for Small, Open, Emerging Economies," with Douglas Laxton. ***Journal of Monetary Economics*** 50, no. 5 (July): 1109-46.

Asani Sarkar. 2003. "A Comparison of Trading Costs in U.S. Corporate, Municipal, and Treasury Bond Markets," with Sugato Chakravarty. ***Journal of Fixed Income*** 13, no. 1 (June): 39-48.

Til Schuermann. 2003. "Credit Risk and Macroeconomic Dynamics," with M. Hashem Pesaran. ***Medium for Economic Applications*** 11, no. 1: 27-32.

Kevin Stiroh. 2003. "Lessons from the U.S. Growth Resurgence," with Dale W. Jorgenson and Mun S. Ho. ***Journal of Policy Modeling*** 25: 453-70.

Publications and Papers: July-September 2003

Publications are available at **www.newyorkfed.org/rmaghome**.

Economic Policy Review, Vol. 9

No. 3, September 2003

Part 1

"Economic Statistics: New Needs for the Twenty-First Century." Selected papers from a conference cosponsored by the Federal Reserve Bank of New York, the Conference on Research in Income and Wealth, and the National Association for Business Economics, July 11, 2002.

Opening Remarks
Jamie B. Stewart, Jr.

Price Hedonics: A Critical Review
Charles R. Hulten

Remarks on the Measurement, Valuation, and Reporting of Intangible Assets
Baruch Lev

Productivity Measurement Issues in Services Industries: "Baumol's Disease" Has Been Cured
Jack E. Triplett and Barry P. Bosworth

Part 2

Articles

What Market Risk Capital Reporting Tells Us about Bank Risk
Beverly J. Hirtle

Formulating the Imputed Cost of Equity Capital for Priced Services at Federal Reserve Banks
Edward J. Green, Jose A. Lopez, and Zhenyu Wang

Measuring Treasury Market Liquidity
Michael J. Fleming

Current Issues in Economics and Finance, Vol. 9

No. 7, July 2003
Job Declines in New York–New Jersey Region to Slow in 2003; Modest Growth Seen for 2004
James Orr and Rae Rosen
Second District Highlights

No. 8, August 2003
Has Structural Change Contributed to a Jobless Recovery?
Erica L. Groshen and Simon Potter

No. 9, September 2003
What Moves Sovereign Bond Markets? The Effects of Economic News on U.S. and German Yields
Linda Goldberg and Deborah Leonard

Staff Reports

Available only online.

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