July 2001

Research
UPDATE
from the Federal Reserve Bank of New York

RESEARCH AND MARKET ANALYSIS GROUP
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High Stock Returns Drove the Rise in the Household Equity Share in the 1990s

The growing prominence of stocks as a household asset in the 1990s encouraged the view that vast numbers of Americans were eagerly tracking market developments and buying up stocks. But in a new study ("Stocks in the Household Portfolio: A Look Back at the 1990s," ***Current Issues in Economics and Finance***, vol. 7, no. 4), Joseph Tracy and Henry Schneider argue that exceptionally high returns on equities—rather than aggressive investment behavior—accounted for much of the increased importance of stocks.

Using data on individual households from the Survey of Consumer Finances, the authors show that the typical American investor reacted to market trends "sluggishly": "Most households that owned some stocks during the period did not rush to buy more," and "most households that held no stocks refrained from acquiring them."

According to Tracy and Schneider, stocks claimed an increasingly larger share of the household asset portfolio in the 1990s primarily because the returns on stocks were so much greater than those on other household investments such as real estate or bonds. The authors' statistical analysis reveals that differential asset returns account for fully 53 percent of the rise in the household equity share. A shift in investment behavior, by contrast, explains only 18 percent.

Although other factors—including the rapid growth of the population in the 40 to 59 age range and the restructuring of retirement plans—also contributed to the increased importance of stocks, "the dominant factor by far was the high relative return to equity."

Also in This Issue…

Monetary Policy, Viewed from Three Perspectives, Is Subject of Fed Conference

The extraordinary financial innovation and change that have occurred over the past few years are likely to affect both the conduct and the transmission of monetary policy. To offer insight into the possible effects, the Research and Market Analysis Group recently sponsored the conference "Financial Innovation and Monetary Transmission."

More than 100 representatives from central banks, universities, and the private sector attended the sessions, which were organized around three themes: the reserves market, the overall macroeconomic environment, and the financial markets and institutions.

In the first session, the presenters examined how changes in the market for overnight reserves, such as lower reserve requirements and declining reserve balances, might affect the implementation of monetary policy. Their research indicated that these changes have diminished the direct role of reserve balances in policy implementation while augmenting the importance of policy announcements.

Possible changes in the relationship between macroeconomic variables and monetary policy were the focus of the second session. Several papers documented changes in the transmission mechanism to housing and consumption. Others argued that the observed link between monetary policy and the real economy might have changed for reasons unrelated to transmission changes. For instance, changes in how the Federal Reserve sets monetary policy in response to economic news as well as structural changes—such as improvements in inventory management that have made the real economy less volatile—were cited.

The final session explored how trends in financial markets and institutions might alter the transmission mechanisms of monetary policy. Among the trends considered were the increase in securitization, the consolidation of the financial services industry, and the heightened importance of capital adequacy standards for financial institutions. The evidence suggested that although securitization may have reduced the impact of interest rates on spending, changes in bank lending standards have remained closely linked to lending and economic activity.

The conference papers will be published in an upcoming issue of the Bank's ***Economic Policy Review***. Preliminary versions are available at **www.newyorkfed.org/pihome/news/speeches/finmon/finmon.html**.

Publications and Papers

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

- ***The Economic Policy Review***—a policy-oriented research journal focusing on macroeconomic, banking, and financial market topics.
- ***Current Issues in Economics and Finance***—a newsletter-style publication offering concise and timely analyses of economic and financial topics.
- ***Second District Highlights***—a regional supplement to ***Current Issues*** covering financial and economic developments in the Federal Reserve System's Second District.
- ***Staff Reports***—technical papers intended for publication in leading economic and finance journals. This series is available only on-line.
- ***Publications & Other Research***—an annual catalogue of the Group's research output.

New Titles in the *Staff Reports* Series

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

Macroeconomics and Growth

No. 122

Productivity: What Is It, and Why Do We Care about It?

Charles Steindel and Kevin J. Stiroh

U.S. productivity growth has been the focus of considerable attention in recent years. This paper presents a broad overview of productivity—both labor and total factor—and discusses its importance. The authors describe the official U.S. productivity statistics prepared by the Bureau of Labor Statistics and discuss several stylized facts. They show how productivity relates to critically important variables like long-run growth, living standards, and inflation, and describe the proximate factors that determine labor productivity using a standard growth accounting framework. Finally, the authors outline a series of unresolved productivity issues that have direct implications for the future of the U.S. economy.

No. 126

Recent Changes in the U.S. Business Cycle

Marcelle Chauvet and Simon Potter

The U.S. business cycle expansion, which started in March 1991, is the longest on record. This study examines whether the expansion is a onetime, unique event or whether its length results from a change in U.S. economic stability. Bayesian methods are used to estimate a common factor model that allows for structural breaks in the dynamics of a wide range of macroeconomic variables. The study finds strong evidence that a reduction in volatility is common to the series examined. Furthermore, the reduction implies that future expansions will be considerably longer than the historical average.

No. 131

A Primer on the Economics and Time Series Econometrics of Wealth Effects: A Comment

Martin Lettau, Sydney Ludvigson, and Nathan Barczi

In a recent paper, Davis and Palumbo (2001) investigate the empirical relationship between aggregate consumption, asset wealth, and labor income. Although cointegration implies that an equilibrium relationship ties these variables together in the long run, Davis and Palumbo focus on a short-run structural question: how quickly does consumption adjust to changes in income and wealth—within a quarter, or over many quarters? They claim to answer this question, and imply that spending adjusts only gradually after gains or losses in income or wealth have been realized. This comment argues that a statistical methodology different from that of Davis and Palumbo is required to address this question, and once the methodology has been employed, the evidence weighs heavily against their interpretation.

International

No. 121

Gender Differences in the Labor Market Effects of the Dollar

Linda Goldberg and Joseph Tracy

Although the dollar has been shown to influence workers' expected wages, the analysis to date has focused on the male workforce. This paper shows that exchange-rate fluctuations also have important implications for women's wages, particularly at job transition. Changes in the dollar's value can cause the wage gap between women who change jobs and women who do not to expand or contract sharply, with the most pronounced effects occurring among the least educated women and women in highly competitive manufacturing industries. In addition, women who remain in their jobs apparently show greater wage sensitivity to currency movements than do their male counterparts.

No. 124

International Dimensions of Optimal Monetary Policy

Giancarlo Corsetti and Paolo Pesenti

The authors argue that strict adherence to inward-looking policy objectives such as domestic output stabilization cannot be optimal when firms' markups are exposed to currency fluctuations. Such policies induce excessive volatility in exchange rates and foreign sales revenue, leading exporters to raise prices in response to higher risk. In general, optimal rules trade off a larger domestic output gap against lower import prices. Monetary rules in a world Nash equilibrium lead to less exchange-rate volatility than inward-looking rules and discretionary policies, even when the latter do not suffer from inflationary (or deflationary) bias. Gains from international monetary cooperation are related in a nonmonotonic way to the degree of exchange-rate pass-through.

No. 125

Currency Orders and Exchange-Rate Dynamics: Explaining the Success of Technical Analysis

Carol L. Osler

This paper provides a microstructural explanation for two key predictions of technical analysis: trends tend to be reversed at predictable support and resistance levels, and trends gain momentum once these levels are crossed. The explanation is based on an analysis of stop-loss and take-profit orders at a large foreign exchange dealing bank—the first foreign exchange data of their kind available to academic research. The orders' requested execution rates are found to be strongly clustered at round numbers, which are often used as support and resistance levels. The marked differences between the clustering patterns of stop-loss and take-profit orders, and between the patterns of stop-loss buy and stop-loss sell orders, explain the success of the two predictions.

No. 127

Border Effects and the Availability of Domestic Products Abroad

Carolyn L. Evans

Borders have a sizable negative impact on trade flows. This "border effect" could have two explanations: less international than domestic trade in the goods actually exchanged between countries ("flow"), or differences between the sets of goods traded internationally and domestically ("availability"). This paper provides a theoretical and empirical examination of the distinction between these explanations. The results suggest that a portion of the border effect is indeed due to differences between the set of goods available domestically and internationally. On average across industries, about half of the effect is due to flows, while the remainder may be due to availability.

No. 128

Home Bias in Trade: Location or Foreign-ness?

Carolyn L. Evans

This paper probes the causes of home bias, in which consumers generally elect to purchase domestic goods over imports. The author questions whether this phenomenon arises from pure locational factors, such as tariffs or access to a local distribution network, or an inherent preference for domestic goods. The apparent tendency toward home bias is found to arise almost entirely from locational factors. Moreover, if a firm establishes and sells from a foreign subsidiary, its local sales are found to be nearly on a par with those of domestic firms in that market. "Foreign-ness" per se does not appear to impact purchases of imported goods.

Banking and Finance

No. 123

How Do Stock Repurchases Affect Bank Holding Company Performance?

Beverly Hirtle

The author examines the relationship between stock repurchases and financial performance for a large sample of bank holding companies from 1987 to 1998. Higher levels of repurchases in one year are found to be associated with higher profitability and a lower share of problem loans in the subsequent year. This result appears to be driven primarily by banks with publicly traded stock, especially stock traded on major exchanges. The study also suggests that the repurchase-performance link is driven by different factors for different types of banks. In particular, the evidence is consistent with one hypothesis for banks traded on major exchanges: bank managers may opt to return excess funds to shareholders when they have limited outside investment opportunities.

No. 129

Bank Integration and Business Volatility
Donald Morgan, Bertrand Rime, and Philip Strahan

The authors investigate how bank migration across state lines over the past quarter-century has affected the size and covariance of business fluctuations within states. They conclude that the theoretical effect of integration on business cycle size is ambiguous because some shocks are dampened by integration while others are amplified. Empirically, integration is found to diminish employment growth fluctuations within states and to decrease deviations in growth across them. In other words, business cycles within states become smaller with integration, but more alike. The results for the United States bear on the financial convergence under way in Europe, where banks remain highly fragmented across nations.

No. 130

Idiosyncratic Risk and Volatility Bounds, or Can Models with Idiosyncratic Risk Solve the Equity Premium Puzzle?
Martin Lettau

This paper uses Hansen and Jagannathan's (1991) volatility bounds to evaluate models with idiosyncratic consumption risk. It shows that idiosyncratic risk does not change the volatility bounds when consumers have CRRA preferences and the idiosyncratic shock distribution is independent of the aggregate state. Following Mankiw (1986), the author shows that idiosyncratic risk can help to enter the bounds when idiosyncratic uncertainty depends on the aggregate state of the economy. He computes an upper bound of the volatility bounds using individual income data and assumes that agents must consume their endowment. The model does not pass the Hansen-Jagannathan test, even for very volatile idiosyncratic income data.

Quantitative Methods

No. 132

Markov Switching in Disaggregate Unemployment Rates
Marcelle Chauvet, Chinhui Juhn, and Simon Potter

The authors develop a dynamic factor model with Markov switching to examine secular and business cycle fluctuations in U.S. unemployment rates. In the model, they extract the common dynamics among unemployment rates disaggregated for seven age groups. This framework allows the authors to analyze the contribution of demographic factors to secular changes in unemployment rates as well as the separate contribution of changes due to asymmetric business cycle fluctuations. The study finds strong evidence in favor of the common factor and the switching between high and low unemployment rate regimes. In addition, demographic adjustments are found to account for much of the secular change in the unemployment rate, particularly the abrupt increase in the 1970s and 1980s and the subsequent decrease.

Other New Publications

- ***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 issue reports on the recent conference "The Untapped Urban Market: Attracting Business to the Inner City." The sessions, cosponsored by the Buffalo Branch, examined the economic challenges facing inner-city communities and explored strategies for business development.

www.newyorkfed.org/rmaghome/regional/newsletter.html

Papers Presented by Economists in the Research and Market Analysis Group

Commentary on "A Regulatory Regime for Financial Stability," by David T. Llewellyn, *Arturo Estrella*. Oesterreichische Nationalbank Twenty-Ninth Economics Conference, Vienna, Austria, May 31.

"The Cyclical Behavior of Optimal Bank Capital," *Arturo Estrella*. European Central Bank, Invited Speakers Program, Frankfurt, Germany. Also presented at Workshop on Applied Banking Research, Norges Bank, Oslo, June 12.

"Financial Market Implications of the Federal Debt Paydown," *Michael Fleming*. Asset and Liability Managers Association Annual Meeting, Williamsburg, Virginia, May 3. Also presented at ABN AMRO Global Central Bankers Conference, Amsterdam, June 19.

"Does Foreign Ownership Contribute to Sounder Banks in Emerging Markets? The Latin American Experience," *Linda Goldberg*. World Bank, International Monetary Fund, and Brookings Institution Conference on Foreign Participation in Financial Systems in Developing Countries, New York City, April 21. With B. Gerard Dages and Jennifer Crystal.

"Exchange Rates and Wages," *Linda Goldberg and Joseph Tracy*. National Bureau of Economic Research Universities Research Conference on Labor in the Global Economy, Cambridge, Massachusetts, May 11.

"Local Revenue Hills," *Andrew Haughwout*. University of Illinois-Chicago Department of Economics Seminar, Chicago, Illinois, June 6. With Robert Inman, Steven Craig, and Thomas Luce.

"Time-Varying Risk Premia and the Cost of Capital," *Martin Lettau and Sydney Ludvigson*. Carnegie-Rochester Conference Series on Public Policy, University of Rochester, Rochester, New York, April 20.

"International Dimensions of Optimal Monetary Policy," *Paolo Pesenti*. Massachusetts Institute of Technology Department of Economics Seminar, Cambridge, Massachusetts, May 10. With Giancarlo Corsetti. Also presented at the University of Copenhagen, March 30; the University of Aarhus, Denmark, April 5; INSEAD, Paris, April 9; and New York University, April 24.

"New and Old Economics in the 'New Economy,'" *Kevin Stiroh*. Kiel Institute of World Economics, Kiel, Germany, May 15.

"Are ICT Spillovers Driving the New Economy?" *Kevin Stiroh*. Canadian Economics Association Annual Meeting, Montreal, Canada, June 1.

"Information and the U.S. Productivity Revival: What Do the Industry Data Say?" *Kevin Stiroh*. ZEW (Centre for European Economic Research) Conference on Information and Communication Technologies, Mannheim, Germany, June 18. Also presented at the Bank of Italy, Rome, June 19.

"On the Distributional Effects of Exchange Rate Fluctuations," *Cédric Tille*. Swiss Society of Economics and Statistics Workshop on International Economics, University of Bern, Bern, Switzerland, June 19.

"Can Vertical Specialization Explain the Growth of World Trade?" *Kei-Mu Yi*. Pennsylvania State University Department of Economics Seminar, University Park, Pennsylvania, March 30.

Recently Published

Linda Goldberg and Joseph Tracy. 2001. “Gender Differences in the Labor Market Effects of the Dollar.” ***American Economic Review*** 91, no. 2 (May): 400-5. Papers and Proceedings of the 113th Annual Meeting of the American Economic Association.

Andrew Haughwout. 2001. “Fiscal Policy in Open Cities with Firms and Households,” with Robert Inman. ***Regional Science and Urban Economics*** 31: 147-80.

Kenneth Kuttner. 2001. “Monetary Policy Surprises and Interest Rates: Evidence from the Fed Funds Futures Market.” ***Journal of Monetary Economics*** 47, no. 3 (June): 523-44.

Martin Lettau. 2001. “Have Individual Stocks Become More Volatile? An Empirical Exploration of Idiosyncratic Risk,” with John Campbell, Burton Malkiel, and Yexiao Xu. ***Journal of Finance*** 56, no. 1 (February): 1-43.

Martin Lettau. 2001. “Statistical Estimation and Moment Evaluation of a Stochastic Growth Model with Asset Market Restrictions,” with Gang Gong and Willi Semmler. ***Journal of Economic Behavior and Organization*** 44, no. 1: 85-103.

Martin Lettau and Sydney Ludvigson. 2001. “Consumption, Aggregate Wealth, and Expected Stock Returns.” ***Journal of Finance*** 56, no. 3 (June): 815-49.

Sydney Ludvigson. 2001. “Approximation Bias in Linearized Euler Equations,” with Christina Paxson. ***Review of Economics and Statistics*** 83, no. 2: 242-56.

Paolo Pesenti. 2001. “Welfare and Macroeconomic Interdependence,” with Giancarlo Corsetti. ***Quarterly Journal of Economics*** 116, no. 2 (May): 421-46.

Paolo Pesenti. 2001. Discussion of “Multiple Equilibria, Contagion, and the Emerging Market Crises,” by Paul Masson. In Reuven Glick, Ramon Moreno, and Mark Spiegel, eds., ***Financial Crises in Emerging Markets***, 99-105. Cambridge: Cambridge University Press.

João Santos. 2001. “The Regulation of Bank Capital: A Review of the Theoretical Literature.” ***Financial Markets, Institutions, and Instruments*** 10, no. 2: 41-84.

Chris Stefanadis. 2001. “The Emergence of On-Line Discount Brokers.” New York University ***Stern Business*** (spring/summer): 18-23.

Chris Stefanadis. 2001. “Tying, Investment, and the Dynamic Leverage Theory,” with Jay Pil Choi. ***Rand Journal of Economics*** 32, no. 1 (spring): 52-71.

Kevin Stiroh. 2001. “ICT Productivity Revival.” ***Economic Trends*** 1: 67-71.

Kevin Stiroh. 2001. “The Impact of Vintage and Survival on Productivity: Evidence from Cohorts of U.S. Manufacturing Plants,” with J. Bradford Jensen and Robert H. McGuckin. ***Review of Economics and Statistics*** 83, no. 2 (May): 323-32.

Kevin Stiroh. 2001. “Is IT Driving the U.S. Productivity Revival?” ***International Productivity Monitor*** 2 (spring): 31-6.

Eric van Wincoop. 2001. “National Money as a Barrier to International Trade: The Real Case for Currency Union,” with Andrew K. Rose. ***American Economic Review*** 91, no. 2 (May): 386-90. Papers and Proceedings of the 113th Annual Meeting of the American Economic Association.

Kei-Mu Yi. 2001. “Can World Real Interest Rates Explain Business Cycles in a Small Open Economy?” with William Blankenau and M. Ayhan Kose. ***Journal of Economic Dynamics and Control*** 25 (June/July): 867-89.

Kei-Mu Yi. 2001. “International Trade and Business Cycles: Is Vertical Specialization the Missing Link?” with M. Ayhan Kose. ***American Economic Review*** 91, no. 2 (May): 371-5. Papers and Proceedings of the 113th Annual Meeting of the American Economic Association.

Kei-Mu Yi. 2001. “The Nature and Growth of Vertical Specialization in World Trade,” with David Hummels and Jun Ishii. ***Journal of International Economics*** 54 (June): 75-96.

RESEARCH AND MARKET ANALYSIS GROUP PUBLICATIONS AND PAPERS: April–June 2001

Publications are available at www.newyorkfed.org/rmaghome/publications.html. You can also subscribe to publications or order many back issues from our web site.

Economic Policy Review, Forthcoming

Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature
Benjamin E. Hermalin and Michael S. Weisbach

A Survey of Blockholders and Corporate Control
Clifford G. Holderness

Current Issues in Economics and Finance, Vol. 7

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Stocks in the Household Portfolio: A Look Back at the 1990s
Joseph Tracy and Henry Schneider

No. 5
Curbing Unemployment in Europe: Are There Lessons from Ireland and the Netherlands?
Cédric Tille and Kei-Mu Yi

No. 6
Investing in Information Technology: Productivity Payoffs for U.S. Industries
Kevin J. Stiroh

Staff Reports

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