Abstracts of Articles Accepted in Journals, Books, and Conference Volumes*

United States Disability Policy in a Changing Environment

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Published in *Journal of Economic Perspectives* 16(1) (Winter 2002) pp. 213–224.

In this paper we provide a broader perspective from which to evaluate current disability policy. We begin by reviewing the major aspects of the Disability Insurance and Supplemental Security Income programs. We then examine trends in employment and disability benefit receipt among those with disabilities, paying particular attention to the last 15 years. Within this framework we summarize the primary difficulties in crafting an efficient and equitable assistance program for a heterogeneous population that changes with its environment. Finally, we place disability policy in the context of the broader United States social welfare system and consider how changes in other social welfare programs likely will affect disability program usage in the future.

How Working-Age People with Disabilities Fared over the 1990s Business Cycle

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Published in *Ensuring Health and Income Security for an Aging Workforce,* eds. Peter Burdetti, et al., pp. 291–346. Kalamazoo, MI: Upjohn Institute for Employment, 2001.

Using data from the March Current Population Survey (CPS) we show that while the longest peacetime economic expansion in the United States' history has increased the economic well-being of most Americans, the majority of working-age men and women with disabilities have been left behind. Robust economic growth since the recession of the early 1990s has lifted nearly all percentiles of the income distribution of working-age men and women without disabilities beyond their previous business cycle peak levels of 1989. In contrast, the majority of working-age men and women with disabilities did not share in economic growth over this period. Not only did their employment and labor earnings fall during the recession of the early 1990s, but their employment and earnings continued to fall during the economic expansion that followed.

Black-White Wage Inequality in the 1990s—A Decade of Progress

Mary C. Daly, with
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University of Connecticut

Published in *Economic Inquiry* 40(1) (January 2002) pp. 31–41.

Using Current Population Survey data, we find that the gap between the wages of black and white males declined during the 1990s at a rate of about 0.60 percentage point per year. Wage convergence was most rapid among workers with fewer than 10 years of potential experience, with declines in the gap averaging 1.40 percentage points per year. Using standard decomposition methods, we find that greater occupational diversity and reductions in unobserved or residual differences are important in explaining this trend. General wage inequality tempered the rate of wage convergence between blacks and whites during the 1990s.

*The abstracts are arranged alphabetically by FRB San Francisco authors, whose names are in boldface.

Optimal Indicators of Socioeconomic Status for Health Research

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Forthcoming in *American Journal of Public Health* (July 2002).

This paper examines the relationship between various measures of socioeconomic status (SES) and mortality for a representative sample of individuals. We use data from the Panel Study of Income Dynamics, sampling 3,734 individuals aged 45 and above who participated in the 1984 interview and tracking them between 1984 and 1994 using Cox event-history regression models. We found that wealth has the strongest associations with subsequent mortality, and these associations differ little by age and sex. Other economic measures, especially family size-adjusted household income, have significant associations with mortality, particularly for nonelderly women. By and large, the economic components of SES have associations with mortality that are at least as strong as, and often stronger than, more conventional components (e.g., completed schooling, occupation).

Population Mobility and Income Inequality in California

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Published in *California Counts* 2(4) (May 2001). Public Policy Institute of California.

We examine trends in family income inequality through 1999, focusing in particular on the relationship between inequality and population movement into and out of California. We find that international immigration explains about one-third of California's growing inequality over the past three decades, while the substantial exodus from the state in the 1990s had little effect, since out-migrants tended to be in families at all levels of the income distribution.

The Effects of Pensions, Health, and Health Insurance on Retirement: A Comparative Analysis of California and the Nation

Mary C. Daly
Robert G. Valletta

Published in *Employment and Health Policies for Californians Over 50,* eds. Dorothy Rice and Edward Yelin, pp. 183–200. San Francisco: UCSF and the California Wellness Foundation, 2001.

Among the factors that affect individual retirement decisions, previous research has identified the timing of social security payments, private pension eligibility, health status, and health insurance coverage as key determinants. In this chapter, we first review existing research on the links between retirement outcomes and these key determinants. We then examine the impact of the first three factors (excluding health insurance) relying primarily on data from the 1998 California Work and Health Survey. We also compare results from the California survey with results based on nationally representative samples from the Current Population Survey and the Health and Retirement Survey. The empirical results indicate substantial effects of social security, private pensions, and poor health on retirement decisions in California and in the nation as a whole.

Inflation Expectations and the Stability Properties of Nominal GDP Targeting

Richard Dennis

Published in *The Economic Journal* 111 (January 2001) pp. 103–113.

Ball (1999) uses a small closed economy model to show that nominal GDP targeting can lead to instability. This paper extends Ball's model to uncover the role inflation expectations play in generating this instability. Allowing inflation expectations to be formed by the more general mixed expectations process, which encompasses Ball's model, we show that nominal GDP targeting is unlikely to lead to instability. We further show that in Ball's model where exact targeting causes instability, moving to inexact targeting restores stability.

Fixed or Floating: Is It Still Possible to Manage in the Middle?

Reuven Glick

Published in *Financial Markets and Policies in East Asia,* ed. Gordon de Brouwer. New York: Routledge, 2001.

This paper reviews the theoretical and empirical basis for the view that intermediate ("soft") exchange rate regimes have become increasingly less feasible. It shows that the proportion of countries with hard currency pegs or flexible exchange rates has increased over time, and that the countries remaining in the "shrinking middle" typically must restrict capital movements. The paper also assesses the feasibility of alternative exchange rate arrangements for the developing countries of East Asia.

This paper was presented to the conference on "Financial Markets and Policies in East Asia" at the Australian National University, Canberra, September 4–5, 2000.

Banking and Currency Crises: How Common Are Twins?

Reuven Glick, with
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University of California, Santa Cruz

Published in *Financial Crises in Emerging Markets,* eds. Reuven Glick, Ramon Moreno, and Mark M. Spiegel, pp. 35–69. New York: Cambridge University Press, 2001.

The coincidence of banking and currency crises associated with the Asian financial crisis has drawn renewed attention to causal and common factors linking the two phenomena. In this paper, we analyze the incidence and underlying causes of banking and currency crises in 90 industrial and developing countries over the 1975–1997 period. We measure the individual and joint ("twin") occurrence of bank and currency crises and assess the extent to which each type of crisis provides information about the likelihood of the other.

We find that the twin crisis phenomenon is most common in financially liberalized emerging markets. The strong contemporaneous correlation between currency and bank crises in emerging markets is robust, even after controlling for a host of macroeconomic and financial structure variables and possible simultaneity bias. We also find that the occurrence of banking crises provides a good leading indicator of currency crises in emerging markets. The converse does not hold, however, as currency crises are not a useful leading indicator of the onset of future banking crises. We conjecture that the openness of emerging markets to international capital flows, combined with a liberalized financial structure, make them particularly vulnerable to twin crises.

Does a Currency Union Affect Trade? The Time Series Evidence

Reuven Glick, with
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University of California, Berkeley

Forthcoming in
European Economic Review.

Does leaving a currency union reduce international trade? This paper answers this question using a large annual panel data set covering 217 countries from 1948 through 1997. During this sample a large number of countries left currency unions; they experienced economically and statistically significant declines in bilateral trade, after accounting for other factors. Assuming symmetry, we estimate that a pair of countries that starts to use a common currency experiences a near doubling in bilateral trade.

Payer Type and the Returns to Bypass Surgery: Evidence from Hospital Entry Behavior

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A. Mark Fendrick,
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Forthcoming in
Journal of Health Economics.

In this paper we estimate the returns associated with the provision of coronary artery bypass graft (CABG) surgery, by payer type (Medicare, HMO, etc.). Because reliable measures of prices and treatment costs are often unobserved, we seek to infer returns from hospital entry behavior. We estimate a model of patient flows for CABG patients that provides inputs for an entry model. We find that FFS provides a high return throughout the study period. Medicare, which had been generous in the early 1980s, now provides a return that is close to zero. Medicaid appears to reimburse less than average variable costs. HMOs essentially pay at average variable costs, though the return varies inversely with competition.

A Theory of Liquidity in Residential Real Estate Markets

John Krainer

Published in
Journal of Urban Economics 49(1)
(January 2001), pp. 32–53.

A "hot" real estate market is one where prices are rising, average selling times are short, and the volume of transactions is higher than the norm. "Cold" markets have the opposite characteristics—prices are falling, liquidity is poor, and volume is low. This paper provides a theory to match these observed correlations. I show that liquidity can be good while prices are high because the opportunity cost of failing to complete a transaction is high for both buyers and sellers. I also show how state varying liquidity depends on the absence of smoothly functioning rental markets.

Equilibrium Valuation of Illiquid Assets

John Krainer, with
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Published in *Economic Theory* 19(2)
(January 2002), pp. 223–242.

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We develop an equilibrium model of illiquid asset valuation based on search and matching. We propose several measures of illiquidity and show how these measures behave. We also show that the equilibrium amount of search may be less than, equal to, or greater than the amount of search that is socially optimal. Finally, we show that excess returns on illiquid assets are fair games if returns are defined to include the appropriate shadow prices.

Fiscal Policy, Increasing Returns, and Endogenous Fluctuations

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Forthcoming in
Macroeconomic Dynamics 6(5) (2002).

This paper examines the quantitative implications of government fiscal policy in a discrete-time one-sector growth model with a productive externality that generates social increasing returns to scale. Starting from a laissez-faire economy that exhibits local indeterminacy, we show that the introduction of a constant capital tax or subsidy can lead to various forms of endogenous fluctuations, including stable 2-, 4-, 8-, and 10-cycles, quasi-periodic orbits, and chaos. In contrast, a constant labor tax or subsidy has no effect on the qualitative nature of the model's dynamics. We show that the use of local steady-state analysis to detect the presence of multiple equilibria in this class of models can be misleading. For a plausible range of capital tax rates, the log-linearized dynamical system exhibits saddle-point stability, suggesting a unique equilibrium, while the true nonlinear model exhibits global indeterminacy. This result implies that stabilization policies designed to suppress sunspot fluctuations near the steady state may not prevent sunspots, cycles, or chaos in regions away from the steady state. Overall, our results highlight the importance of using a model's nonlinear equilibrium conditions to fully investigate global dynamics.

Evaluating the Predictive Accuracy of Volatility Models

Jose A. Lopez

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20(2) (March 2001) pp. 87–109.

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Standard statistical loss functions, such as mean-squared error, are commonly used for evaluating financial volatility forecasts. In this paper, an alternative evaluation framework, based on probability scoring rules that can be more closely tailored to a forecast user's decision problem, is proposed. According to the decision at hand, the user specifies the economic events to be forecast, the scoring rule with which to evaluate these probability forecasts, and the subsets of the forecasts of particular interest. The volatility forecasts from a model are then transformed into probability forecasts of the relevant events and evaluated using the selected scoring rule and calibration tests. An empirical example using exchange rate data illustrates the framework and confirms that the choice of loss function directly affects the forecast evaluation results.

Evaluating Covariance Matrix Forecasts in a Value-at-Risk Framework

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(Spring 2001) pp. 69–98.

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Covariance matrix forecasts of financial asset returns are an important component of current practice in financial risk management. A wide variety of models, ranging from matrices of simple summary measures to covariance matrices implied from option prices, are available for generating such forecasts. In this paper, we evaluate the relative accuracy of different covariance matrix forecasts using standard statistical loss functions and a value-at-risk (VaR) framework. This framework consists of hypothesis tests examining various properties of VaR models based on these forecasts as well as an evaluation using a regulatory loss function.

Using a foreign exchange portfolio, we find that implied covariance matrix forecasts appear to perform best under standard statistical loss functions. However, within the economic context of a VaR framework, the performance of VaR models depends more on their distributional assumptions than on their covariance matrix specification. Of the forecasts examined, simple specifications, such as exponentially weighted moving averages of past observations, perform best with regard to the magnitude of VaR exceptions and regulatory capital requirements. These results provide empirical support for the commonly used VaR models based on simple covariance matrix forecasts and distributional assumptions.

Bank Credit versus Nonbank Credit, and the Provision of Liquidity by the Central Bank

Milton H. Marquis

Published in *Challenges for Central Banking,* eds. Anthony Santomero, Staffan Viotti, and Anders Vredin (Chapter 14) pp. 247–270. Boston: Kluwer, 2001.

When banks tighten their terms and conditions on business lending, bank loan rates rise, and the economy slows, as firms shift their borrowing away from the banks and toward nonbank sources of credit. When tighter lending standards coincide with economic downturns, the contraction of output and the decline in employment are exacerbated. The central bank can offset this decline in bank loans by injecting liquidity into the banking system. However, this action raises inflationary expectations, and nominal interest rates in the credit markets increase, such that the consequent decline in nonbank credit can more than offset the increase in bank credit, and the economy experiences an even sharper decline.

Bank Intermediation over the Business Cycle

Milton H. Marquis, with Tor Einarsson, *University of Iceland*

Published in *Journal of Money, Credit, and Banking* 33(4) (November 2001) pp. 876–899.

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A model is developed in which banks engage in valued asset transformation by converting illiquid assets (working capital loans) into highly liquid demand deposit accounts that households use for transactions purposes. Consumption-smoothing behavior induces countercyclicality in the degree to which firms rely on bank borrowings to finance their working capital expenses, which is consistent with U.S. data. The importance of financial markets that provide alternative sources of short-term funds to firms is also illustrated. Absent these markets, nominal interest rates become nearly perfectly positively correlated with output, which is counterfactual, and monetary shocks induce (perhaps artificially) large aggregate employment responses.

Fiscal Policy and Human Capital Accumulation in a Home Production Economy

Milton H. Marquis, with Tor Einarsson, *University of Iceland*

Published in *Contributions to Macroeconomics* 1(1) (2001), article 2. http://www.bepress.com/bejm/contributions/vol1/iss1/art2/.

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The decision to invest in human capital is introduced into a home production economy with fiscal policy distortions where balanced growth is achieved through Harrod-neutral, labor-augmenting technology spillovers into home production. In comparison with home production economies that abstract from human capital accumulation, the welfare losses from distortionary taxes are quite large due to their adverse effect on growth. However, the transition costs associated with a move to a less distortionary tax system are proportionately much lower. This owes to the fact that growth enhances the adjustment process such that less radical and more empirically plausible swings in employment, investment, and output are required to reach the new balanced growth path.

Pegging and Macroeconomic Performance in East Asia

Ramon Moreno

Published in *ASEAN Economic Bulletin* 18(1) (April 2001) pp. 48–62.

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This paper assesses the case for pegging in East Asia by briefly surveying the recent literature on the choice of exchange rate regime. Using a new method for classifying exchange rate regimes based on exchange rate volatility, East Asia's experience with pegged exchange rates is examined. In contrast to other areas, inflation in East Asia under pegging is similar to that under floating, as are monetary and fiscal conditions. Growth tends to be higher under pegging, but the channels are not clear since pegging was not associated with greater competitiveness nor with lower exchange rate volatility, and openness was not higher under pegging. Before 1997 pegging was associated with higher cumulative inflation and similar cumulative growth around currency crisis episodes. Thus differences in economic performance across pegged and floating regimes in East Asia are relatively modest. However, the 1997 crises—which were preceded by pegged regimes—were followed by unprecedented contractions in output that suggest that the costs of pegging may have risen.

Assessing Nominal Income Rules for Monetary Policy with Model and Data Uncertainty

Glenn D. Rudebusch

Published in *The Economic Journal* 112 (April 2002), pp. 402–432.

Nominal income rules for monetary policy have long been debated, but two issues are of particular recent interest. First, there are questions about the performance of such rules over a range of plausible empirical models—especially models with and without explicit rational inflation expectations. Second, there are questions about the performance of these rules in real time using the type of data that is actually available contemporaneously to policymakers rather than final revised data. This paper determines optimal monetary policy rules in the presence of such model uncertainty and real-time data uncertainty and finds only a limited role for nominal output growth.

Is the Fed Too Timid? Monetary Policy in an Uncertain World

Glenn D. Rudebusch

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Estimates of the Taylor rule using historical data from the past decade or two suggest that monetary policy in the U.S. can be characterized as having reacted in a moderate fashion to output and inflation gaps. In contrast, the parameters of optimal Taylor rules derived using empirical models of the economy often recommend much more vigorous policy responses. This paper attempts to match the historical policy rule with an optimal policy rule by incorporating uncertainty into the derivation of the optimal rule and by examining plausible variations in the policymaker's model and preferences.

Term Structure Evidence on Interest Rate Smoothing and Monetary Policy Inertia

Glenn D. Rudebusch

Forthcoming in
Journal of Monetary Economics.

Numerous studies have used quarterly data to estimate monetary policy rules or reaction functions that appear to exhibit a very slow partial adjustment of the policy interest rate. The conventional wisdom asserts that this gradual adjustment reflects a policy inertia or interest rate smoothing behavior by central banks. However, such quarterly monetary policy inertia would imply a large amount of forecastable variation in interest rates at horizons of more than three months, which is contradicted by evidence from the term structure of interest rates. The illusion of monetary policy inertia evident in the estimated policy rules likely reflects the persistent shocks that central banks face.

Eurosystem Monetary Targeting: Lessons from U.S. Data

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European Economic Review 46(3)
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Using a small empirical model of inflation, output, and money estimated on U.S. data, we compare the relative performance of monetary targeting and inflation targeting. The results show monetary targeting to be quite inefficient, yielding both higher inflation and output variability. This is true even with a nonstochastic money demand formulation. Our results are also robust to using a P^* model of inflation. Therefore, in these popular frameworks, there is no support for the prominent role given to money growth in the Eurosystem's monetary policy strategy.

Financial Development and Growth: Are the APEC Nations Unique?

Mark Spiegel

Forthcoming in
Proceedings of the 2001 APEC World Economic Outlook Symposium.

This paper examines panel evidence concerning the role of financial development in economic growth. I decompose the well-documented relationship between financial development and growth to examine whether financial development affects growth solely through its contribution to growth in factor accumulation rates, or whether it also has a positive impact on total factor productivity, in the manner of Benhabib and Spiegel (2000). I also examine whether the growth performances of a subsample of APEC countries are uniquely sensitive to levels of financial development. The results suggest that indicators of financial development are correlated with both total factor productivity growth and investment. However, many of the results are sensitive to the inclusion of country fixed effects, which may indicate that the financial development indicators are proxying for broader country characteristics. Finally, the APEC subsample countries appear to be more sensitive to financial development, both in the determinations of subsequent total factor productivity growth and in rates of factor accumulation, particularly accumulation of physical capital.

Monetary Union Expansion: The Role of Market Power in Trade

Mark Spiegel

Published in *European Monetary Union and Capital Markets,*
Vol. 2 of *International Finance Review,*
eds. J. Choi and J. Wrase.
Oxford: Elsevier, 2001.

This paper examines the feasibility of a monetary union expansion which is desirable for both the entering country and the existing union members. The paper concentrates on the fact that the outside country is likely to be small relative to the existing monetary union, and lack the resistance to inflation which comes with market power in trade. Consideration of this market power effect allows for mutually desirable entry if the outside nation central bank is moderately more averse to inflation than the central bank of the existing monetary union.

The Bootstrap and Multiple Imputations: Harnessing Increased Computing Power for Improved Statistical Tests

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Journal of Economic Perspectives 15(4)
(Fall 2001) pp. 129–142.

The bootstrap and multiple imputations are two techniques that can enhance the accuracy of estimated confidence bands and critical values. Although they are computationally intensive, relying on repeated sampling from empirical data sets and associated estimates, modern computing power enables their application in a wide and growing number of econometric settings. We provide an intuitive overview of how to apply these techniques, referring to existing theoretical literature and various applied examples to illustrate both their possibilities and their pitfalls.

A Submerging Labor Market Institution? Unions and the Non-wage Aspects of Work

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University of California, Irvine
John DiNardo,
University of California, Berkeley

Forthcoming in *Emerging Labor Market Institutions for the 21st Century,*
NBER and University of Chicago Press.

Using data from a variety of sources, and straightforward econometric methods, we investigate the differences between union and non-union jobs. Despite the substantial decline in the percentage of workers unionized over the last 20 years, union jobs continue to differ from comparable non-union jobs in a large variety of nonwage characteristics. In general union workers work fewer hours per week and fewer weeks per year, spend more time on vacation, and spend more time away from work due to own illness or the illness of a family member. They are also more likely to be offered and to be covered by health insurance, more likely to receive retiree health benefits, more likely to be offered and to be covered by a pension plan, and more likely to receive dental insurance, long-term disability plans, paid sick leave, maternity leave, and paid vacation time.

Union Effects on Health Insurance Provision and Coverage in the United States

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Forthcoming in
Industrial and Labor Relations Review.

During the past two decades, union density has declined in the United States and employer provision of health benefits has undergone substantial changes in extent and form. Using individual data spanning the years 1983–1997, combined with establishment data for 1993, we update and extend previous analyses of private-sector union effects on employer-provided health benefits. We find that the union effect on health insurance coverage rates has fallen somewhat but remains large, due to an increase over time in the union effect on employee "take-up" of offered insurance, and that declining unionization explains 20 to 35 percent of the decline in employee health coverage. The increasing union take-up effect is linked to union effects on employees' direct costs for health insurance and the availability of retiree coverage.

Is Embodied Technology the Result of Upstream R&D? Industry-Level Evidence

Daniel J. Wilson

Forthcoming in
Review of Economic Dynamics.

This paper provides an exploratory analysis of whether data on the research and development (R&D) spending directed at particular technological/product fields can be used to measure industry-level capital-embodied technological change. Evidence from the patent literature suggests that the R&D directed at a product, as the main input into the "innovation" production function, is proportional to the value of the innovations in that product. I confirm this hypothesis by showing that the decline in the relative price of a good is positively correlated with the R&D directed at that product. The hypothesis implies that the technological change, or innovation, embodied in an industry's capital is proportional to the R&D that is done ("upstream") by the economy as a whole on each of the capital goods that the ("downstream") industry purchases. Using R&D data from the National Science Foundation, I construct measures of capital-embodied R&D. I find they have a strong effect on conventionally-measured TFP growth, a phenomenon that seems to be due partly to the mismeasurement of quality change in the capital stock and partly to a positive correlation between embodied and disembodied technological change. Finally, I find the cross-industry variation in empirical estimates of embodied technological change accord with the cross-industry variation in embodied R&D.