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HOUSEHOLD TRADING AND SEGMENTED MARKETS

The authors examine a monetary economy where households incur fixed transactions costs when exchanging bonds and money and, as a result, carry money balances in excess of current spending to limit the frequency of such trades. Since only a fraction of households choose to actively trade bonds and money at any given time, the market is endogenously segmented. Moreover, because households in this model economy have the ability to alter the timing of their trading activities, the extent of market segmentation varies over time in response to real and nominal shocks. The authors find that this added flexibility can substantially reinforce both sluggishness in aggregate price adjustment and the persistence of liquidity effects in real and nominal interest rates relative to that seen in models with exogenously segmented markets.

Working Paper 07-1, "Inflation and Interest Rates with Endogenous Market Segmentation," Aubhik Khan, Federal Reserve Bank of Philadelphia, and Julia Thomas, Federal Reserve Bank of Philadelphia

SEPARATION RATES AND UNEMPLOYMENT VARIABILITY: A REASSESSMENT

In a recent influential paper, Shimer uses CPS duration and gross flow data to draw two conclusions: (1) separation rates are nearly acyclic; and (2) separation rates contribute little to the variability of unemployment. In this paper, the authors assert that Shimer's analysis is problematic, for two reasons: (1) cyclicality is not evaluated systematically; and (2) the measured contributions to unemployment variability do not actually decompose total unemployment variability. The authors address these problems by applying a standard statistical measure of business cycle co-movement and constructing a precise decomposition of unemployment variability. Their results disconfirm Shimer's conclusions. More specifically, separation rates are highly countercyclical under various business cycle measures and filtering methods. The authors also find that fluctuations in separation rates make a substantial contribution to overall unemployment variability.

Working Paper 07-2, "Reassessing the Shimer Facts," Shigeru Fujita, Federal Reserve Bank of Philadelphia, and Garey Ramey, University of California, San Diego

OVERCONFIDENCE IN FINANCIAL MARKETS AND CONSUMPTION

Overconfidence is a widely documented phenomenon. Empirical evidence reveals two types of overconfidence in financial markets: investors both overestimate the average rate of return to their assets and underestimate uncertainty associated with the return. This paper explores implications of overconfidence in financial markets for consumption over the life cycle. The authors obtain a closed-form solution to the time-inconsistent problem facing an overconfident investor/consumer who has a CRRA utility function. They use this solution to show that overestimation of the mean return gives rise to a hump in consumption during the work life if and only if the elasticity of intertemporal substitution in consumption is less than unit. They find that underestimation of uncertainty has little effect on the long-run average behavior of consumption over the work life. Their calibrated model produces a hump-shaped work-life consumption profile with both the age and the amplitude of peak consumption consistent with empirical observations.

Working Paper 07-3, "Overconfidence in Financial Markets and Consumption Over the Life Cycle," Frank Caliendo, Colorado State University, and Kevin X. D. Huang, Vanderbilt University (formerly Federal Reserve Bank of Philadelphia)

CAPITAL AND MACROECONOMIC INSTABILITY

The authors establish the necessary and sufficient conditions for local real determinacy in a discrete-time production economy with monopolistic competition and a quadratic price adjustment cost under forward-looking policy rules, for the case where capital is in exogenously fixed supply and the case with endogenous capital accumulation. Using these conditions, they show that (i) indeterminacy is more likely to occur with a greater share of payment to capital in value-added production cost; (ii) indeterminacy can be more or less likely to occur with constant capital than with variable capital; (iii) indeterminacy is more likely to occur when prices are modeled as jump variables than as predetermined variables; (iv) indeterminacy is less likely to occur with a greater degree of steady-state monopolistic distortions; and (v) indeterminacy is less likely to occur with a greater degree of price stickiness or with a higher steady-state inflation rate. In contrast to some existing research, the authors' analysis indicates that capital tends to lead to macroeconomic instability by affecting firms' pricing behavior in product markets rather than households' arbitrage activity in asset markets even under forward-looking policy rules.

Working Paper 07-4, "Capital and Macroeconomic Instability in a Discrete-Time Model with Forward-Looking Interest Rate Rules," Kevin X. D. Huang, Vanderbilt University (formerly Federal Reserve Bank of Philadelphia), and Qinglai Meng, Chinese University of Hong Kong

CYCLICALITY OF JOB LOSS, JOB FINDING, AND HIRING RATES

Drawing on CPS data, the authors show that total monthly job loss and hiring among U.S. workers, as well as job loss hazard rates, are strongly countercyclical, while job finding hazard rates are strongly procyclical. They also find that total job loss and job loss hazard rates lead the business cycle, while total hiring and job finding rates trail the cycle. In the current paper the authors use information from the Survey on Income and Program Participation (SIPP) to reevaluate these findings. SIPP data are used to construct new longitudinally consistent gross flow series for U.S. workers, covering 1983-2003. The results strongly validate the authors' findings, with two important exceptions: (1) total hiring leads the cycle in the SIPP data, and (2) the job loss rate is substantially more volatile than the job finding rate at business cycle frequencies.

Working Paper 07-5, "The Cyclicality of Worker

Flows: New Evidence from the SIPP," Shigeru Fujita, Federal Reserve Bank of Philadelphia; Christopher J. Nekarda, University of California, San Diego; and Garey Ramey, University of California, San Diego

THREE POINTS ABOUT PATENTS

The author uses intuition derived from several of his research papers to make three points. First, in the absence of a common law balancing test, application of uniform patentability criteria favors some industries over others. Policymakers must decide the optimal tradeoff across industries. Second, if patent rights are not closely related to the underlying inventions, more patenting may reduce R&D in industries that are both R&D and patent intensive. Third, for reasons largely unrelated to intellectual property, the U.S. private innovation system has become far more decentralized than it was a generation ago. It is reasonable to inquire whether a patent system that worked well in an era of more centralized innovation functions as well for the more decentralized environment of today.

Working Paper 07-6, "Economics and the Design of Patent Systems," Robert M. Hunt, Federal Reserve Bank of Philadelphia

IMPLICATIONS OF URBAN DENSITY FOR LABOR MARKET SEARCH AND MATCHING

This paper generalizes and extends the labor market search and matching model of Berliant, Reed, and Wang (2006). In this model, the density of cities is determined endogenously, but the matching process becomes more efficient as density increases. As a result, workers become more selective in their matches, and this raises average productivity (the intensive margin). Despite being more selective, the search process is more rapid so that workers spend more time in productive matches (the extensive margin). The effect of an exogenous increase in land area on productivity depends on the sensitivity of the matching function and congestion costs to changes in density.

Working Paper 07-7, "Matching Externalities and Inventive Productivity," Robert M. Hunt, Federal Reserve Bank of Philadelphia

MEASURING THE PERSONAL SAVING RATE

Is it possible to forecast using poorly measured data? According to the permanent income hypothesis, a low personal saving rate should predict rising future income (Campbell, 1987). However, the U.S. personal saving rate is initially poorly measured and has been repeatedly revised upward in benchmark revisions. The authors use both conventional and real-time estimates of the personal saving rate in vector autoregressions to forecast real disposable income; using the level of the personal saving rate in real time would have almost invariably made forecasts worse, but first differences of the personal saving rate are predictive. They also test the lay hypothesis that a low personal saving rate has implications for consumption growth and find no evidence of forecasting ability.

Working Paper 07-8, "Mismeasured Personal Saving and the Permanent Income Hypothesis," Leonard I. Nakamura, Federal Reserve Bank of Philadelphia, and Tom Stark, Federal Reserve Bank of Philadelphia

BASEL II AND ITS POTENTIAL COMPETITIVE EFFECTS

The authors analyze the potential competitive effects of the proposed Basel II capital regulations on U.S. bank credit card lending. They find that bank issuers operating under Basel II will face higher regulatory capital minimums than Basel I banks, with differences due to the way the two regulations treat reserves and gain-on-sale of securitized assets. During periods of normal economic conditions, this is not likely to have a competitive effect; however, during periods of substantial stress in credit card portfolios, Basel II banks could face a significant competitive disadvantage relative to Basel I banks and nonbank issuers.

Working Paper 07-9, "Competitive Effects of Basel II on U.S. Bank Credit Card Lending," William W. Lang, Federal Reserve Bank of Philadelphia; Loretta J. Mester, Federal Reserve Bank of Philadelphia and The Wharton School, University of Pennsylvania; and Todd A. Vermilyea, Federal Reserve Bank of Philadelphia

FORGIVE AND FORGET?

In many countries, lenders are not permitted to use information about past defaults after a specified period of time has elapsed. The authors model this provision and determine conditions under which it is optimal.

They develop a model in which entrepreneurs must repeatedly seek external funds to finance a sequence of risky projects under conditions of both adverse selection and moral hazard. They show that forgetting a default makes incentives worse, ex-ante, because it reduces the punishment for failure. However, following a default it is generally good to forget because pooling riskier agents with safer ones makes exerting high effort to preserve their reputation more attractive.

The authors' key result is that if agents are sufficiently patient and low effort is not too inefficient, the optimal law would prescribe some amount of forgetting — that is, it would not permit lenders to fully use past information. The authors also show that such a law must be enforced by the government — no lender would willingly agree to forget. Finally, they also use their model to examine the policy debate that arose during the adoption of these rules.

Working Paper 07-10, "Bankruptcy: Is It Enough to Forgive or Must We Also Forget?," Ronel Elul, Federal Reserve Bank of Philadelphia, and Piero Gottardi, Università Ca' Foscari di Venezia

USING STATE-LEVEL DATA TO GAUGE EMPLOYMENT GROWTH VOLATILITY

This study documents a general decline in the volatility of employment growth during the period 1960 to 2002 and examines its possible sources. A unique aspect of the analysis is the use of state-level panel data. Estimates from a pooled cross-section/time-series model indicate that aggregate and state-level factors each explain an important share of the total variation in state-level volatility. Specifically, state-level factors have contributed as much as 29 percent, while aggregate factors are found to account for up to 45 percent of the variation. With regard to state-level factors, the share of state total employment in manufacturing and state banking deregulation each contributed significantly to fluctuations in volatility. Among the aggregate factors separately identified, monetary policy, changes in the inventory-to-sales ratio, changes in the ratio of total trade to GDP, and oil prices significantly affected state-level volatility, although to differing degrees.

Working Paper 07-11, "The Long and Large Decline in State Employment Growth Volatility," Gerald Carlino, Federal Reserve Bank of Philadelphia; Robert DeFina, Villanova University, and Visiting Scholar, Federal Reserve Bank of Philadelphia; and Keith Sill, Federal Reserve Bank of Philadelphia

U.S. LABOR MARKET: JOB LOSS, JOB FINDING, AND VACANCIES

This paper establishes robust cyclical features of the U.S. labor market by estimating VAR models of the job loss rate, job finding rate, and vacancies. To identify the "aggregate business cycle shock," the author adopts the agnostic Bayesian identification approach developed by Uhlig (2005) and others. His approach traces not only responses of transition rates and vacancies but also those of gross job losses and hires and thereby the stock of unemployment in one unified framework. The author finds that when a negative shock occurs, (i) both the job loss rate and gross job losses rise quickly and remain persistently high, (ii) the job finding rate and vacancies drop in a hump-shaped manner, and (iii) gross hires respond little initially but eventually rise. He argues that these results point to the importance of job loss in understanding U.S. labor market dynamics. The

paper also considers the "disaggregate model," which uses data disaggregated by six demographic groups and incorporates transitions into and out of the labor force. The author finds that job loss continues to play a dominant role among prime-age male workers, while, for other groups, changes in the job finding rate are more important.

Working Paper 07-12, "Dynamics of Worker Flows and Vacancies: Evidence from the Agnostic Identification Approach," Shigeru Fujita, Federal Reserve Bank of Philadelphia

ESTIMATING POVERTY TRENDS AMONG WORKING FAMILIES

This study provides empirical evidence on recent trends in poverty among working families based on the headcount rate and a broader alternative that incorporates the headcount rate, the depth of poverty, and income inequality among the poor. Estimates reveal that the indexes produce significantly different trends. The headcount rate indicates a reduction in overall working poverty for the sample period, while the alternative index showed no statistically significant change. The same result was found for various population subgroups. Decompositions of the index changes show that tax changes contributed to lower values for both the headcount rate and the alternative index, largely due to recent expansions of the earned income tax credit. Changes in transfer payments added to measured poverty, mirroring the retrenchment of welfare and other transfer programs. Shifts in market-based income decreased both indexes.

Working Paper 07-13, "A Comparison of Poverty Trends and Policy Impacts for Working Families Using Different Poverty Indexes," Robert H. DeFina, Villanova University, and Visiting Scholar, Federal Reserve Bank of Philadelphia