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EXTENDED BENEFITS AND UNEMPLOYMENT TRANSITION RATES

Using the monthly CPS, the author estimates unemployment-to-employment (UE) transition rates and unemployment-to-inactivity (UN) transition rates by unemployment duration for male workers. When estimated for the period of 2004-2007, during which no extended benefits are available, both of the transition-rate profiles show clear patterns consistent with the expiration of regular benefits at 26 weeks. These patterns largely disappear in the profiles for the period of 2009-2010, during which large-scale extensions have become available. The author conducts counterfactual experiments in which the estimated profiles for 2009-2010 are replaced by the hypothetical profiles inferred from the ones for 2004-2007. The results indicate that the benefit extensions in recent years have raised male workers' unemployment rate by 0.9-1.7 percentage points. Roughly 50-60 percent of the total increase is attributed to the effects on UE transition rates and the remaining part is accounted for by the effects on UN transition rates.

Working Paper 10-35, "Effects of the UI Benefit Extensions: Evidence from the Monthly CPS," Shigeru Fujita, Federal Reserve Bank of Philadelphia

HOW INVENTORIES AFFECT TRADE, INFORMATION, AND PRICES

The authors study trade between a buyer and a seller when both may have existing inventories of assets similar to those being traded. They analyze how these inventories affect trade, information dissemination, and price formation. The authors show that when the buyer's and seller's initial leverage is moderate, inventories increase price and trade volume, but when leverage is high, trade may become impossible (a "market freeze"). Their analysis predicts a pattern of trade in which prices and trade volume first increase, and then markets break down. The authors use their model to discuss implications for regulatory intervention in illiquid markets.

Working Paper 10-36, "Market Run-Ups, Market Freezes, and Leverage," Philip Bond, University of Minnesota, and Yaron Leitner, Federal Reserve Bank of Philadelphia

EXPLAINING LIFE-CYCLE PATTERNS OF HOUSEHOLDS' TIME USE AND CONSUMPTION

The authors incorporate home production in a dynamic general equilibrium model of consumption and saving with illiquid housing and a collateralized borrowing constraint. They show that the model is capable of explaining life-cycle patterns of households' time use and consumption of different categories. Specifically, households' market hours and home hours are fairly stable

early in the life cycle. Market hours start to decline sharply at age 50, while home hours begin to increase at age 55. Households' consumption of the market good, home input, and housing services all exhibit hump shapes over the life cycle, with the market good having the most pronounced hump, followed by the home input, and then housing services. A plausibly parameterized version of the authors' model predicts that the interaction of the labor efficiency profile and the availability of home production technology explain households' time use over the life cycle. The resulting income profiles, the endogenous borrowing constraint, and the presence of home production account for the initial hump in all three consumption goods. The consumption profiles in the second half of the life cycle are mostly driven by the complementarity of home hours, home input, and housing in home production.

Working Paper 0-37, "Consumption and Time Use over the Life Cycle," Michael Dotsey, Federal Reserve Bank of Philadelphia; Wenli Li, Federal Reserve Bank of Philadelphia; and Fang Yang, State University of New York at Albany

DATA REVISIONS AND THE STATISTICAL (UN)RELIABILITY OF MEASURES OF PRODUCTIVITY GROWTH

Productivity growth is carefully scrutinized by macroeconomists because it plays key roles in understanding private savings behavior, the sources of macroeconomic shocks, the evolution of international competitiveness, and the solvency of public pension systems, among other things. However, estimates of recent and expected productivity growth rates suffer from two potential problems: (i) recent estimates of growth trends are imprecise, and (ii) recently published data often undergo important revisions.

This paper documents the statistical (un)reliability of several measures of aggregate productivity growth in the U.S. by examining the extent to which they are revised over time. The authors also examine the extent to which such revisions contribute to errors in forecasts of U.S. productivity growth.

The authors find that data revisions typically cause appreciable changes in published estimates of productivity growth rates across a range of different productivity measures. Substantial revisions often occur years after the initial data release, which they argue contributes significantly to the overall uncertainty policymakers face. This emphasizes the need for means of reducing the uncertainty facing policymakers and policies robust to uncertainty about current economic conditions.

Working Paper 11-1, "Lessons from the Latest Data on U.S. Productivity," Jan P.A.M. Jacobs, University of Groningen, and Simon van Norden, HEC Montreal and Visiting Scholar, Federal Reserve Bank of Philadelphia

TERMS OF CREDIT IN A COMPETITIVE MARKET

The author studies the terms of credit in a competitive market in which sellers (lenders) are willing to repeatedly finance the purchases of buyers (borrowers) by engaging in a credit relationship. The key frictions are: (i) the lender is unable to observe the borrower's ability to repay a loan; (ii) the borrower cannot commit to any long-term contract; (iii) it is costly for the lender to contact a borrower and to walk away from a contract; and (iv) transactions within each credit relationship are not publicly observable. The lender's optimal contract has two key properties: delayed settlement and debt forgiveness. Asymmetric information gives rise to the property of delayed settlement, which is a contingency in which the lender allows the borrower to defer the repayment of his loan in exchange for more favorable terms of credit within the relationship. This property, together with the borrowers' lack of commitment, gives rise to debt forgiveness. When the borrower's participation constraint binds, the lender needs to "forgive" part of the borrower's debt to keep him in the relationship. Finally, the author studies the impact of the changes in the initial cost of lending on the terms of credit.

Working Paper 11-2, "A Dynamic Model of Unsecured Credit," Daniel R. Sanches, Federal Reserve Bank of Philadelphia

STRATEGIC FACTORS AND THE DECISION TO DEFAULT ON FIRST VS. SECOND LIEN MORTGAGES

Strategic default behavior suggests that the default process is not only a matter of an inability to pay. Economic costs and benefits affect the incidence and timing of defaults. As with prior research, the authors find that people default strategically as their home value falls below the mortgage value (exercise the put option to default on their first mortgage). While some

of these homeowners default on both first mortgages and second lien home equity lines, a large portion of the delinquent borrowers have kept their second lien current during the recent financial crisis. These second liens, which are current but stand behind a seriously delinquent first mortgage, are subject to a high risk of default. On the other hand, relatively few borrowers default on their second liens while remaining current on their first. This paper explores the strategic factors that may affect borrower decisions to default on first vs. second lien mortgages. The authors find that borrowers are more likely to remain current on their second lien if it is a home equity line of credit (HELOC) as compared to a closed-end home equity loan. Moreover, the size of the unused line of credit is an important factor. Interestingly, they find evidence that the various mortgage loss mitigation programs also play a role in providing incentives for homeowners to default on their first mortgages.

Working Paper 11-3, "Strategic Default on First and Second Lien Mortgages During the Financial Crisis," Julapa Jagtiani, Federal Reserve Bank of Philadelphia, and William W. Lang, Federal Reserve Bank of Philadelphia

OPTIMAL MONETARY POLICY WHEN FIAT MONEY AND PRIVATE DEBT COEXIST

The authors study optimal monetary policy in a model in which fiat money and private debt coexist as a means of payment. The credit system is endogenous and allows buyers to relax their cash constraints. However, it is costly for agents to publicly report their trades, which is necessary for the enforcement of private liabilities. If it is too costly for the government to obtain information regarding private transactions, then it relies on the public information generated by the private credit system. If not all private transactions are publicly reported, the government has imperfect public information to implement monetary policy. In this case, the authors show that there is no incentive-feasible policy that can implement the socially efficient allocation. Finally, they characterize the optimal policy for an economy with a low record-keeping cost and a large number of public transactions, which results in a positive long-run inflation rate.

Working Paper 11-4, "Optimal Monetary Policy in a Model of Money and Credit," Pedro Gomis-Porqueras, Australian National University, and Daniel R. Sanches, Federal Reserve Bank of Philadelphia