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EXPLORING LIMITED ATTENTION AND CHECKING OVERDRAFTS

The authors explore dynamics of limited attention in the \$35 billion market for checking overdrafts, using survey content as shocks to the salience of overdraft fees. Conditional on selection into surveys, individuals who face overdraft-related questions are less likely to incur a fee in the survey month. Taking multiple overdraft surveys builds a “stock” of attention that reduces overdrafts for up to two years. The effects are significant among consumers with lower education and financial literacy. Consumers avoid overdrafts not by increasing balances but by making fewer debit transactions and cancelling automatic recurring withdrawals. The results raise new questions about consumer financial protection policy.

Working Paper 11-17, “Limited and Varying Consumer Attention: Evidence from Shocks to the Salience of Bank Overdraft Fees,” Victor Stango, University of California, Davis, and Jonathan Zinman, Dartmouth College, and Visiting Scholar, Federal Reserve Bank of Philadelphia

ENTREPRENEURS AND AGGREGATE AND IDIOSYNCRATIC RISK IN THE PRESENCE OF BORROWING CONSTRAINTS

This paper studies the quantitative properties of a general equilibrium model where a continuum of heterogeneous entrepreneurs are subject to aggregate as well as idiosyncratic risks in the presence

of a borrowing constraint. The calibrated model matches the highly skewed wealth and income distributions of entrepreneurs. The authors provide an accurate solution to the model despite the significant nonlinearities that are absent in the economy with uninsurable labor income risk. The model is capable of generating the average private equity premium of roughly 3 percent and a low risk-free rate. The model also produces procyclicality of the risk-free rate and countercyclicality of the average private equity premium. The countercyclicality of the average equity premium is largely driven by tightening (loosening) of financing constraints during recessions (booms).

Working Paper 11-18, “Private Equity Premium in a General Equilibrium Model of Uninsurable Investment Risk,” Francisco Covas, Board of Governors of the Federal Reserve System, and Shigeru Fujita, Federal Reserve Bank of Philadelphia

IMPACT OF REDUCING TARIFFS ON WELFARE, TRADE, AND THE ORGANIZATION OF PRODUCTION

The authors study the effects of tariffs in a dynamic variation of the Melitz (2003) model, a monopolistically competitive model with heterogeneity in productivity across establishments and fixed costs of exporting. With fixed costs of starting to export that are on average 3.7 times as large as the costs incurred to continue as an exporter, the model can match both the size distribution of exporters and annual transition in and

out of exporting among U.S. manufacturing establishments. The authors find that the tariff equivalent of these fixed costs is nearly 30 percentage points. They use the calibrated model to estimate the effect of reducing tariffs on welfare, trade, and export participation. The authors find sizeable gains to moving to free trade equivalent to 1.03 percent of steady-state consumption. Considering the transition dynamics following the cut in tariffs, they find that the model predicts economic activity overshoots its steady state, with the peak in output coming 10 years after the trade reform. Because of this overshooting, steady-state changes in consumption understate the welfare gain to trade reform. The authors also find that simpler trade models that abstract from these export dynamics provide a poor approximation of the aggregate responses from their more general model.

Working Paper 11-19, "Establishment Heterogeneity, Exporter Dynamics, and the Effects of Trade Liberalization," George Alessandria, Federal Reserve Bank of Philadelphia, and Horag Choi, Monash University

CONSTRUCTING ERROR BANDS FOR IMPULSE RESPONSES IN VARs

There is a fast growing literature that partially identifies structural vector autoregressions (SVARs) by imposing sign restrictions on the responses of a subset of the endogenous variables to a particular structural shock (sign-restricted SVARs). To date, the methods that have been used are only justified from a Bayesian perspective. This paper develops methods of constructing error bands for impulse response functions of sign-restricted SVARs that are valid from a frequentist perspective. The authors also provide a comparison of frequentist and Bayesian error bands in the context of an empirical application — the former can be twice as wide as the latter.

Working Paper 11-20, "Inference for VARs Identified with Sign Restrictions," Hyungsik Roger Moon, University of Southern California; Frank Schorfheide, University of Pennsylvania, and Visiting Scholar, Federal Reserve Bank of Philadelphia; Eleonora Granziera, Bank of Canada; and Mihye Lee, University of Southern California

POLITICAL FRICTIONS AND THE CONSUMPTION VOLATILITY PUZZLE

Standard real business cycle theory predicts that consumption should be smoother than output, as ob-

served in developed countries. In emerging economies, however, consumption is more volatile than income. In this paper the authors provide a novel explanation of this phenomenon, the "consumption volatility puzzle," based on political frictions. They develop a dynamic stochastic political economy model where parties that disagree on the size of government (right-wing and left-wing) alternate in power and face aggregate uncertainty. While productivity shocks affect only consumption through responses to output, political shocks (switches in political ideology) change the composition between private and public consumption for a given output size via changes in the level of taxes. Since emerging economies are characterized by less stable governments and more polarized societies, the effects of political shocks are more pronounced. For a reasonable set of parameters the authors confirm the empirical relationship between political polarization and the ratio of consumption volatility to output volatility across countries.

Working Paper 11-21, "Partisan Cycles and the Consumption Volatility Puzzle," Marina Azzimonti, Federal Reserve Bank of Philadelphia, and Matthew Talbert, University of Texas, Austin

INVESTIGATING THE TRUST PREFERRED SECURITIES CDO MARKET

This paper investigates the development, issuance, structuring, and expected performance of the trust preferred securities collateralized debt obligation (TruPS CDO) market. Developed as a way to provide capital markets access to smaller banks, thrifts, insurance companies, and real estate investment trusts (REITs) by pooling the issuance of TruPS into marketable CDOs, the market grew to \$60 billion of issuance from its inception in 2000 through its abrupt halt in 2007. As evidenced by rating agency downgrades, current performance, and estimates from the authors' own model, TruPS CDOs are likely to perform poorly. Using data and valuation software from the leading provider of such information, they estimate that large numbers of the subordinated bonds and some senior bonds will be either fully or partially written down, even if no further defaults occur going forward. The primary reason for these losses is that the underlying collateral of TruPS CDOs is small, unrated banks whose primary asset is commercial real estate (CRE). During their years of greatest issuance from 2003 to 2007, the booming real estate market and record low number of bank failures

masked the underlying risks that are now manifest. Another reason for the poor performance of bank TruPS CDOs is that smaller banks became a primary investor in the mezzanine tranches of bank TruPS CDOs, something that is also complicating regulators' resolutions of failed banks. To understand how this came about, the authors explore in detail the symbiotic relationship between dealers and rating agencies and how they modeled and sold TruPS CDOs. In their concluding comments, the authors provide several lessons learned for policymakers, regulators, and market participants.

Working Paper 11-22, "The Trust Preferred CDO Market: From Start to (Expected) Finish," Larry Cordell, Michael Hopkins, and Yilin Huang, Federal Reserve Bank of Philadelphia

EFFECTS OF ASYMMETRIES IN RE-ELECTION PROBABILITIES ON PUBLIC POLICY AND THE ECONOMY

This paper studies the effects of asymmetries in re-election probabilities across parties on public policy and their subsequent propagation to the economy. The struggle between opposing groups — that disagree on the composition of public consumption — results in governments being endogenously short-sighted: Systematic under investment in infrastructure and over-spending on public goods arise, as resources are more valuable when in power. Because the party enjoying an electoral advantage is relatively less short-sighted, it devotes a larger proportion of government revenues to productive public investment. Political turnover, together with asymmetric policy choices, induces economic fluctuations in an otherwise deterministic environment.

The author characterizes the long-run distribution of capital and shows that output increases on average with political advantage, despite the fact that the size of the government expands as a percentage of GDP. Volatility, on the other hand, is non-monotonic in political power and is an additional source of inefficiency.

Working Paper 11-23, "The Dynamics of Public Investment Under Persistent Electoral Advantage," Marina Azzimonti, Federal Reserve Bank of Philadelphia

CORE INFLATION MEASURES AS PREDICTORS OF TOTAL INFLATION

Policymakers tend to focus on core inflation measures because they are thought to be better predictors of total inflation over time horizons of import to policymakers. The authors find little support for this assumption. While some measures of core inflation are less volatile than total inflation, core inflation is not necessarily the best predictor of total inflation. The relative forecasting performance of models using core inflation and those using only total inflation depends on the inflation measure and time horizon of the forecast. Unlike previous studies, the authors provide a measure of the statistical significance of the difference in forecast errors.

Working Paper 11-24, "Core Measures of Inflation as Predictors of Total Inflation," Theodore M. Crone, Swarthmore College; N. Neil K. Khettry, Murray, Devine & Company; Loretta J. Mester, Federal Reserve Bank of Philadelphia, and the Wharton School, University of Pennsylvania; and Jason A. Novak, Federal Reserve Bank of Philadelphia