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BANKRUPTCY REFORM'S ROLE IN THE MORTGAGE CRISIS

This paper argues that the U.S. bankruptcy reform of 2005 played an important role in the mortgage crisis and the current recession. When debtors file for bankruptcy, credit card debt and other types of debt are discharged — thus loosening debtors' budget constraints. Homeowners in financial distress can therefore use bankruptcy to avoid losing their homes, since filing allows them to shift funds from paying other debts to paying their mortgages. But a major reform of U.S. bankruptcy law in 2005 raised the cost of filing and reduced the amount of debt that is discharged. The authors argue that an unintended consequence of the reform was to cause mortgage default rates to rise. Using a large data set of individual mortgages, they estimate a hazard model to test whether the 2005 bankruptcy reform caused mortgage default rates to rise. Their major result is that prime and subprime mortgage default rates rose by 14 percent and 16 percent, respectively, after bankruptcy reform. The authors also use difference-in-difference to examine the effects of three provisions of bankruptcy reform that particularly harmed homeowners with high incomes and/or high assets and find that the default rates of affected homeowners rose even more. Overall, they calculate that bankruptcy reform caused the number of mortgage defaults to increase by around 200,000 per year even before the start of the financial crisis, suggesting that the reform increased the severity of the crisis when it came.

Working Paper 10-16, "Did Bankruptcy Reform Cause Mortgage Default Rates to Rise?"

Wenli Li, Federal Reserve Bank of Philadelphia; Michelle J. White, University of California-San Diego; and Ning Zhu, University of California-Davis

BASEL II AND CAPITAL TO SUPPORT MORTGAGE PORTFOLIOS

The recent mortgage crisis has resulted in several bank failures as the number of mortgage defaults increased. The current Basel I capital framework does not require banks to hold sufficient amounts of capital to support their mortgage lending activities. The new Basel II capital rules are intended to correct this problem. However, Basel II models could become too complex and too costly to implement, often resulting in a trade-off between complexity and model accuracy. In addition, the variation of the model, particularly how mortgage portfolios are segmented, could have a significant impact on the default and loss estimated and thus could affect the amount of capital that banks are required to hold. This paper finds that the calculated Basel II capital varies considerably across the default prediction model and segmentation schemes, thus providing banks with an incentive to choose an approach that results in the least required capital for them. The authors also find that a more granular segmentation model produces smaller required capital, regardless of the economic environment. In addition, while borrowers' credit risk factors are consistently superior, economic factors have also played a role in mortgage default during the financial crisis.

Working Paper 10-17, "Can Banks Circumvent Minimum Capital Requirements?"

The Case of Mortgage Portfolios under Basel II,” Christopher Henderson, Federal Reserve Bank of Philadelphia, and Julapa Jagtiani, Federal Reserve Bank of Philadelphia

THE ROLE OF INVENTORIES IN THE ECONOMIC CRISIS

This paper examines the role of inventories in the decline of production, trade, and expenditures in the U.S. in the economic crisis of late 2008 and 2009. Empirically, the authors show that international trade declined more drastically than trade-weighted production or absorption and there was a sizeable inventory adjustment. This is most clearly evident for autos, the industry with the largest drop in trade. However, relative to the magnitude of the U.S. downturn, these movements in trade are quite typical. The authors develop a two-country general equilibrium model with endogenous inventory holdings in response to frictions in domestic and foreign transactions costs. With more severe frictions on international transactions, in a downturn, the calibrated model shows a larger decline in output and an even larger decline in international trade, relative to a more standard model without inventories. The magnitudes of production, trade, and inventory responses are quantitatively similar to those observed in the current and previous U.S. recessions.

Working Paper 10-18, “The Great Trade Collapse of 2008-09: An Inventory Adjustment?” George Alessandria, Federal Reserve Bank of Philadelphia; Joseph P. Kaboski, Notre Dame University; and Virgiliu Midrigan, New York University

BAYESIAN FORECASTING USING A DEMOCRATIC PRIOR

This paper proposes Bayesian forecasting in a vector autoregression using a democratic prior. This prior is chosen to match the predictions of survey respondents. In particular, the unconditional mean for each series in the vector autoregression is centered around long-horizon survey forecasts. Heavy shrinkage toward the democratic prior is found to give good real-time predictions of a range of macroeconomic variables, as these survey projections are good at quickly capturing end-point shifts.

Working Paper 10-19, “Evaluating Real-Time VAR Forecasts with an Informative Democratic Prior,” Jonathan H. Wright, Johns Hopkins University, and Visiting Scholar, Federal Reserve Bank of Philadelphia

SHORT-TERM NOMINAL INTEREST RATE AND INFLATION EXPECTATIONS

The author shows that the short-term nominal interest rate can anchor private-sector expectations into low inflation, more precisely, into the best equilibrium reputation can sustain. He introduces nominal asset markets in an infinite horizon version of the Barro-Gordon model. The author then analyzes the subset of sustainable policies compatible with any given asset price system at date $t=0$. While there are usually many sustainable inflation paths associated with a given set of asset prices, the best sustainable inflation path is implemented if and only if the short-term nominal bond is priced at a certain discount rate. His results suggest that policy frameworks must also be evaluated on their ability to coordinate expectations.

Working Paper 10-20, “Sustainable Monetary Policy and Inflation Expectations,” Roc Armenter, Federal Reserve Bank of Philadelphia

ASSESSING THE PERFORMANCE OF CREDIT RATING SYSTEMS

In this paper, the authors use credit rating data from two Swedish banks to elicit evidence on banks' loan monitoring ability. They test the banks' ability to forecast credit bureau ratings, and vice versa, and show that bank ratings are able to predict future credit bureau ratings. This is evidence that bank credit ratings, consistent with theory, contain valuable private information. However, the authors also find that public ratings have an ability to predict future bank ratings, implying that internal bank ratings do not fully or efficiently incorporate all publicly available information. This suggests that risk analyses by banks or regulators should be based on both internal bank ratings and public ratings. They also document that the credit bureau ratings add information to the bank ratings in predicting bankruptcy and loan default. The methods the authors use represent a new basket of straightforward techniques that enable both financial institutions and regulators to assess the performance of credit rating systems.

Working Paper 10-21, “Credit Ratings and Bank Monitoring Ability,” Leonard I. Nakamura, Federal Reserve Bank of Philadelphia, and Kasper Roszbach, Sveriges Riksbank, University of Groningen, and Visiting Scholar, Federal Reserve Bank of Philadelphia