APRIL 11-12, 2013

"The Determinants of Subprime Loan Performance Following a Modification"

Presenter: Maximilian Schmeiser, Federal Reserve Board

Maximilian Schmeiser is an economist at the Board of Governors of the Federal Reserve System in the Division of Consumer and Community Affairs, where he conducts research on consumer financial products and household financial behavior. Before joining the Board, he was an assistant professor in the Department of Consumer Science at the University of Wisconsin–Madison and the associate director for research and computing at the University of Wisconsin's Center for Financial Security. He received his MS and PhD in policy analysis and management from Cornell University, his MA in economics from McMaster University, and his BA in economics from the University of Regina. His research has been published in academic journals, including *Applied Economics, Economics & Human Biology, Health Economics, Industrial and Labor Relations Review*, and *Journal of Policy Analysis and Management*, as well as in numerous government publications.

Coauthor: Matthew Gross, Federal Reserve Board

Summary and Findings: This paper examines the evolution of mortgage modification terms obtained by distressed subprime borrowers during the recent housing crisis, and the effect of the various types of modifications on the subsequent loan performance. Using a unique data set that contains detailed loan level information on mortgages, modification terms, second liens, and home values, we estimate a multinomial logit model in a hazard framework. Our results suggest that converting adjustable rate mortgages to fixed rates, reducing principal balances, and reducing total payment and interest (P&I) are the most effective at reducing the likelihood of subsequent redefault and foreclosure. Modifications that involve increasing the loan principal—primarily through capitalized interest and fees—are significantly more likely to redefault, even controlling for changes in P&I. We further find substantial variation in the likelihood of redefault across mortgage servicers.

Implications for Policy and Practice: This research provides estimates of which types of loan modifications are the most effective at reducing subsequent redefault and keeping borrowers in their homes. It attempts to quantify the relative effectiveness of, for example, a principal reduction relative to a reduction of the interest rate or extension of the amortization period. With this knowledge, policies can be developed to promote the most cost-effective strategies for mitigating foreclosures.