Good Afternoon!

Thank you Senator Sherrod Brown and members of the Senate subcommittee for inviting me to talk about the role of household leverage in the current economic crisis and the importance of household balance sheets in explaining macroeconomic fluctuations.

My comments today are based on research that my coauthor Amir Sufi of University of Chicago and I have done over the past several years.

In order to understand the role of household balance sheets in the current economic slump, we must begin from the unprecedented and staggering increase in household debt during the 2000's. A sharp expansion in the supply of mortgage credit in the U.S. resulted in household debt doubling from 7 trillion dollars in 2001 to 14 trillion dollars in 2007.

This massive accumulation of debt by households with largely stagnant real wages was not sustainable. Correspondingly, towards the second half of 2006, mortgage delinquencies started to creep up and about five quarters later the U.S. entered into a full blown recession.

Our research shows quite conclusively that the main reason for the U.S. economic collapse was a process referred to as **deleveraging** of household balance sheets: Faced with reduced net worth, highly levered households sharply cut back on consumption to conserve debt capacity and pay back existing debt.

For example, we find that consumption (such as the sale of new automobiles) drops significantly more in areas with high leverage households. This drop in consumption severely impacted job losses as well. For example, job losses in the non-tradable sector such as retail, where businesses must depend on local demand to survive, were much higher in highly indebted counties. Extending these job losses over the entire economy, we find that we can conservatively attribute 4 million of the 6.2 million jobs lost between March 2007 and March 2009 to deleveraging. In other words, 65% of total jobs lost in the U.S. are due to deleveraging and the drop in aggregate demand as a result of it.

Policy choices in the face of the extremely damaging effects of the deleveraging – aggregate demand cycle are somewhat obvious. **We must do more to facilitate principal debt reduction for highly-indebted and underwater homeowners.** The economy can neither afford to foreclose these homes nor bear the costs associated with reduced aggregate demand. Despite almost four years since the start of the deleveraging cycle, only 1 trillion out of the 7 trillion dollars of debt accumulated over 2001-2007 has been paid down or written off.

The dilemma for efforts to reduce household indebtedness is that from a lender's perspective it is not in their interest to write down debt that continues to be serviced on time. But as my analysis highlights, the *collective* consequences of such "individually rational" actions are quite unpleasant. If a large number of financially distressed homeowners cut back on consumption in order to protect their homes and continue paying their mortgages, the aggregate demand and employment consequences hurt everyone. Therefore I repeat: **We must do more to facilitate principal debt reduction for highly-indebted and underwater homeowners.**

In the long run, it is important to keep in mind that the relationship between high household leverage and long economic slumps is not limited to our current experience. In his seminal paper, Irving Fisher in 1933 described the role that high household indebtedness played in deepening and perpetuating the Great Depression. In order to prevent such episodes from happening again, we need to re-evaluate our financial structure. In particular, I would submit that we need to put in place contingencies that will automatically write down the value of outstanding debt if the overall economic environment is sufficiently negative.

For example, mortgage principal can be automatically written down if the local house price index falls below a certain threshold. If we had such contingencies in place in the current mortgage contracts, we could have avoided the extreme economic pain due to the negative deleveraging – aggregate demand cycle.

I thank you for your time and consideration.