Good Morning!

Dear Senator Merkley and members of the Senate subcommittee. Thank you for inviting me. It is a great honor and privilege to be here.

I want to talk today about how we write mortgage contracts. I am a student of financial crises, and the first point I want to make is that mortgage debt – as it is traditionally defined – is responsible both for the large-scale destruction of middle class wealth and for the Great Recession itself.

The typical middle class homeowner has most of his or her wealth invested in his house that has been financed with a high percentage of debt. The result is that a ten or twenty percent fall in house prices can practically wipe out all of his wealth. Ironically the wealthy who hold senior claims on middle class home are not affected to the same extent. The net result is illustrated in chart 2 of my submitted testimony that shows a disproportionate decline in the wealth of middle America during the financial crisis of 2007-09.

Unfortunately the rest of the economy is not immune from losses suffered by the middle class. The economic pain quickly spreads to the rest of the economy due to foreclosure and aggregate demand spillovers. When the loss in home value is more than home equity, millions of homeowners are forced into foreclosure. This depresses house prices further and induces homeowners everywhere – but especially the indebted and less wealthy – to cut back on spending. However, this leads to more problems as millions of workers are laid off due to reduced demand. The negative cycles of foreclosure and reduced aggregate demand feed off each other.

Can we protect middle class wealth and the broader economy from possible downturns in the housing market while maintaining a healthy mortgage market in normal times? I believe the answer is yes, and this is where I would like you to consider the Shared Responsibility Mortgage proposal that I discuss in my testimony.

Shared Responsibility Mortgages are similar to standard 30-year fixed rate mortgages with two important differences. The first difference is the introduction of *downside protection* for the homeowner based on her local house price index that is easily available these days. Under shared responsibility mortgages, the standard 30-year fixed rate mortgage payment will decline by X% if the local house price index declines by X% relative to when the mortgage was issued.

Such a contract is very easy to implement. All we need is a local house price index which is already available. However, downside protection is costly for the lender and will increase the cost of mortgages for borrowers. To compensate for this cost, I introduce a second change in the form of a 5% *capital gain sharing* provision.

The capital gain provision implies that whenever the home owner sells the house – or refinances the mortgage – the lender collects 5% of net capital gain on the house. The lender can diversify the uncertainty of when a particular homeowners sells his or her property by securitizing a large pool of mortgages.

Using historical house price growth and volatility numbers, and mortgage pricing formulae, one can show that the 5% capital gain provision is more than sufficient to compensate the lender for the cost of providing downside protection to the borrower.

The shared responsibility mortgage contract is feasible and simple to implement. Suppose we had such mortgages in the year 2007. Would the fall in house prices have turned out differently? Very much so.

First, middle class wealth is naturally protected. A 20% fall in house prices no longer wipes them out but only translates into a 20% decline in their net wealth. Second, *everyone* benefits as foreclosures are almost entirely avoided. As mortgage payments are automatically adjusted, no homeowner feels underwater. Third, everyone benefits from more limited wealth losses as the reduction in spending is also more limited and thus fewer workers are laid off. My own calculations suggest that most of the job losses and the reduction in GDP between 2007 and 2009 could have been avoided if Shared Responsibility Mortgages were in place instead of the standard mortgages.

My proposed solution is entirely market-based. There is no subsidy from the tax payers involved – ever. In fact, SRMs help reduce budget deficits in the long run by limiting the need for counter-cyclical fiscal deficits. Moreover, SRMs give the lender a direct interest in worrying about potential bubbles. In particular, if many of the lenders fear that the market might be in a bubble, they will raise the interest rate for new mortgages since these mortgages are more likely to require downside protection. There is thus automatic and market-based “leaning against the wind”. Not only do SRMs reduce the negative effects of a bursting bubble, but they also reduce the likelihood of those bubbles appearing in the first place.

What can the government do to promote SRMs given their significant macro and social benefit? One possibility is that the government removes the tax deductibility of interest from standard mortgages and only allows it for SRMs going forward. Both the middle class and the U.S. economy would be better protected as a result.

I thank you for your time and consideration.