Published in International Union for Housing Finance Newsletter, May 2006

Financing a Society of Property Owners: Risks, Instruments, Institutions

Alex J. Pollock

The particular emphasis of this essay is on developing mortgage markets and bond markets together, so they can potentially reinforce each other.

There are only two fundamental choices for financing mortgages: deposits or bonds. Of course there is also some combination of the two, which is probably what you want, so that you do have a bond-based alternative as part of the housing finance system.

There have been many experiments in establishing various forms of bond-based housing finance around the world (I include mortgage-backed securities as a kind of bond). Loic Chiquier, Olivier Hassler and Michael Lea in an excellent paper, "Mortgage Securities in Emerging Markets," [World Bank Policy Research Working Paper 3370, August 2004] summarize these experiments and the subsequent results.

They conclude that there have been a few clear successes, some promising cases still in early stages, and a number of disappointments. One of their most important conclusions is that simpler instruments and structures have a better chance of success, based on numerous specific cases in a wide variety of countries.

My purpose is explore the principles which I believe underlie all the cases, using as illustrations the American experience.

Property Ownership as a Goal

Let us consider the United States when it was an emerging economy and a new country during the 1790s.

The two intellectual giants of the American founding period were Alexander Hamilton and Thomas Jefferson. Hamilton and Jefferson agreed on the centrality of property ownership, although they disagreed on most things. For Hamilton, secure property rights were essential for the development of the future commercial and economic power he envisioned: his views were confirmed by subsequent history. Hamilton also believed in a robust bond market. He was the architect of the U.S. national debt and thus in time of the huge American fixed income market.

U.S. housing finance is well known for the role of Government-Sponsored Enterprises or "GSEs"—Fannie Mae and Freddie Mac, of course. Hamilton was the father of the first American GSE: the First Bank of the United States. This was established in 1791 with a 20-year, limited life charter. We will return later to the topic of GSE charters.

The American founding fathers generally agreed upon property ownership as a goal. While Jefferson famously wrote into the <u>Declaration of Independence</u>, "Life, Liberty, and the Pursuit of Happiness," the others more typically wrote of "Life, Liberty and Property," or of "the means of acquiring, possessing and protecting property."

Although Jefferson changed "Property" into the "Pursuit of Happiness" in the <u>Declaration</u>, he firmly believed in widespread property ownership as essential to a republican form of government and to the republican virtue of the citizens. Of course he was personally picturing an agrarian society.

The current form of property in our urbanized societies is home ownership. And to have home ownership at a relatively young age, say as couples are having children, requires an effective housing finance system.

As is often pointed out, housing finance will be more widely available and work more efficiently if there are clear and enforceable procedures for foreclosure of mortgaged property. This is usually discussed as a necessary right of the mortgage lender. But I consider it more importantly a right of the property owner: the right of the owner to hypothecate property and thereby to obtain credit.

With this basis in political philosophy, let us turn to finance.

Risks, Instruments, Institutions

In considering housing finance systems, we need to think in three dimensions: risks, instruments, and institutions.

It is easiest to think in terms of institutions. I am put in mind of an ancient Roman who observed, "Whenever we were faced by a problem, the answer was to reorganize." As we will all have experienced, that tendency has continued from that day to this, for corporations and governments alike. Of course, institutions are very important.

As are financial instruments. In this context, we want to think especially of bonds which are designed to provide a long-term funding base for mortgage loans.

But most fundamental is to consider the risks of housing finance, specifically how the risks are distributed among the various parties, how they are moved around by the

financial system. Once a house has been financed by debt, the risks are always there they do not go away. The question is where are they—who is bearing them? And who is most competent to bear the various risks?

One of the terms I find irritating is "off-balance sheet" finance. It is obvious that there is no such thing. If there is a financial asset, it is on somebody's balance sheet. If it went off yours, it went on to somebody else's. The only question is: whose? From a systemic point of view, which balance sheets are best for which assets?

Similarly, housing finance discussions often speak of "freeing up capital." But if I have securitized assets or unbundled risks to free up my capital, I have moved the risks to somebody else's capital. Whose? Or did I "free up capital" by moving risks to the government?

The Savings and Loans as a Risk Structure

Let us consider the well-known story of American savings and loan institutions from a risk distribution perspective.

When American savings and loans were reorganized in the 1930s in the wake of the disasters of the Great Depression, careful study led to the design of the <u>least credit risk</u> mortgage loan. This was the long-term, fixed rate, fully amortizing mortgage. From the borrower's point of view, if you simply keep paying the same amount every month, you will in 20 or 30 years retire the loan and own the house free and clear.

The designers of this kind of loan were correct: it is an exceptionally high credit quality instrument. The credit performance of fixed rate loans is systematically better, with lower delinquencies and losses, than that of variable or adjustable rate loans.

The 1930s reforms were also addressing a liquidity issue. A common mortgage had been a five year loan. Obviously the average family would not have the cash to repay the mortgage after five years and was entirely dependent on the ability to refinance it. This put a tremendous liquidity risk on the borrowing household. In the financial panic and depression, loans could not be refinanced and defaulted instead, house prices fell, and mortgages played their part in the overall debt deflation of those years.

The long term fully amortizing mortgage removed the liquidity risk from the households, but moved it to the savings and loans. At the same time, it moved a tremendous interest rate risk to the savings and loans, since the long term fixed rate assets were financed with short term deposits.

As part of this 1930s program, a GSE--the Federal Home Loan Bank System--was set up to issue bonds implicitly guaranteed by the government and provide liquidity support to mortgage lenders. This did work, but did as well transfer risk to the government.

Savings and loans were also provided with deposit insurance, a much more direct and ultimately extremely costly transfer of risk to the government.

As is well known, the inflationary interest rate run-up of the 1970s caused this risk structure to collapse. By 1980, the savings and loan industry was insolvent. The loans made by the Federal Home Loan Banks to savings and loans were fully protected by their collateral, although this increased the loss to the deposit insurer. The deposit insurance corporation was itself massively insolvent and passed on its losses to the government, that is, to the citizens who pay taxes.

A little-known last chapter of this story is that to keep part of the costs of the collapse off the formal budget, the government set up two shell borrowing corporations, which sold 30 and 40 year bonds at a yield of about 9 ½%. These bonds were made non-callable, apparently upon the advice of Wall Street, a big financial mistake in retrospect. Since inflation subsequently fell to 1 to 2%, on an ex post basis, these bonds cost the United States Treasury about 8 % real. This was expensive financing!

An interesting alternative structure to consider, in contrast to savings and loans, is to have mortgage loans financed by the issuance of long term bonds, which are bought by the government's social security program, which is funded by required contributions from employees' wages. This is definitely a sounder mortgage finance structure, but where does its improved liquidity come from? Instead of voluntary savings which can be withdrawn, you now have mandatory savings. I am prone to think that mandatory savings may be a good idea, but this structure has taken savings liquidity away from the households to reduce the risk of the lenders.

The main point is that you have to think about how things are moving around in the risk dimension.

The American GSE Era

Let us turn to instruments, to bond-based mortgage finance in particular, and institutional change. 1980 ended the savings and loan era in U.S. housing finance and began the era of the GSEs, Fannie Mae and Freddie Mac.

Fannie and Freddie are always associated in housing finance discussions with mortgagebacked securities or MBS which move the interest rate, liquidity and prepayment risk of fixed-rate mortgages to the MBS investors.

However, about half of Fannie and Freddie's business and two-thirds of their profits come not from issuing MBS, but from owning mortgage assets on their own balance sheets and financing them by issuing much simpler bonds and notes, both callable and non-callable. Add to this the Federal Home Loan Banks, which also issue bonds and notes, not MBS, to fund their operations. The outstanding stock of this more basic debt of the GSEs together totals well over \$ 2 trillion.

In this sense the GSEs can be thought of as specialized bond-based housing finance institutions. The functional effect of their bond issuance is not too different from European mortgage bonds or "Pfandbriefe."

Issuing such simpler bonds allows more uniform instruments, with potentially larger, more liquid issues and repo financing for dealers or investors. Tying them closely to mortgage loans through specialized issuers or explicit collateral pools can create high credit quality. Of course, you can in addition increase their credit quality by moving risk to the government, as the American GSEs do.

In short, it seems to me that there is a sort of natural combination: Bonds are a good funding base for mortgage loans; and mortgage loans are a good credit quality base for bonds.

Recursiveness and Financial Laws

What makes financial markets endlessly interesting is their recursiveness. They are full of feedback loops, of past expectations already priced in, and of constant adjustments to changing expectations and new information. Financial markets turn subsidies into increased prices of the subsidized asset, risk support into increased risk taking, and GSEs into what no one ever intended or imagined.

I propose two laws and two corollaries for consideration:

<u>Kindleberger's Law</u>, from Charles Kindleberger, the economic historian: No matter how any government tries to control money, financial markets will create however much nearmoney they want.

<u>Pollock's Corollary to Kindleberger's Law</u>: No matter what any government or regulator does, in optimistic times financial markets will create however much risk they want.

<u>Stanton's Law</u>, after Tom Stanton, an expert in government credit programs: Risk always migrates to the hands least competent to manage it.

<u>Pollock's Corollary to Stanton's Law</u>: Clever insiders capture the subsidy, while transferring risk to the less competent and less informed.

I further would like to suggest four lessons from housing finance experience:

1. Pit the clever in competition against the clever: this is market discipline.

2. Make sure originators of mortgage loans keep meaningful credit exposure to their loans, as new financing structures are developed.

- 3. Keep new instruments relatively simple as you introduce change.
- 4. Never, <u>never</u> give a GSE a perpetual charter.

Alexander Hamilton's First Bank of the United States was given a 20-year charter, but this traditional wisdom was forgotten, and Fannie, Freddie and the Federal Home Loan Banks were given perpetual charters. Over the decades, all of them grew and changed beyond recognition. All GSE-like entities, if you do decide to create them, should have a sunset, or a required reauthorization, so they can be reconsidered in the light of experience.

I'll mention one more law, Pollock's Seventh Law: In any complex, recursive situation, you never know what you're really doing.

There will always be change, surprises, learning, and never a final answer in designing the movement of risks, introducing new financial instruments, and developing institutions.

Alex J. Pollock is a Resident Fellow at the American Enterprise Institute in Washington, D.C. and a Past President of the International Union for Housing Finance.