THE AMERICAN ROOTS OF TODAY'S GLOBAL FINANCIAL CRISIS

by

William Freithaler Ford, Ph.D.

presented to

THE PROGRESS FOUNDATION

in

Zurich, Switzerland

on

May 12, 2009

THE AMERICAN ROOTS OF TODAY'S GLOBAL FINANCIAL CRISIS

I. Introduction

Thank you, Dr. Studer, for your very kind introduction and for the Progress Foundation's invitation to share some thoughts with you about the causes, consequences and global efforts to contain the ongoing international financial crisis. As suggested by the title of my talk, I believe that the root causes of the global crisis, unfortunately, are buried in the history of the U.S. housing and mortgage markets.

Nowadays, almost all informed participants in the global financial markets have heard and read about the trillions of dollars worth of so-called "toxic assets", emanating from Wall Street and distributed through other financial centers, which have contaminated the balance sheets of financial institutions throughout the world, including here in Switzerland. It is also generally understood that the most toxic ingredients in those asset packages are the so-called "subprime" and "Alt-A" mortgages (a.k.a. "liar loans"), created, packaged and distributed mainly by U.S. financial institutions. It may be useful, therefore, to begin our search for root causes of the global financial crisis with a brief review of the historical evolution of the U.S. housing and mortgage markets that gave rise to the flood of toxic assets which now contaminate the world's financial markets.

II. The American Dream of Home Ownership

One of the tap roots of the financial crisis in America is our long-standing cultural and political bias in favor of individual home ownership. In the earliest stages of our nation's history, as mainly European immigrants began to occupy and settle our native lands, helping each other to build and occupy individually owned homes gradually emerged as a center-piece of the so-called "American Dream." Along our frontiers, when a young couple married, their family, friends and neighbors would all pitch in to build a home where the couple could raise their family. Meanwhile, in the settled towns and cities behind our frontier areas, building societies and financial cooperatives emerged to directly finance the creation of homes in those areas. Fast forward to the 21st century and this noble impulse to help each other build a home still manifests itself, today, in urban efforts such as former U.S. President Jimmy Carter's "Habitat for Humanity" program. In that program, community members help poor families build a home by working together to obtain a plot of land plus the necessary materials. The "sweat equity" labor contributed by their friends and neighbors then results in the creation of a nice new home for a poor family. Such direct efforts to fulfill the American dream of home ownership for a small number of families are, of course, commendable.

III. Evolution of America's Mortgage Markets

Over time, however, as we achieved our so-called "Manifest Destiny" by expanding our nation's boundaries from the Atlantic to the Pacific Ocean, the

process of creating and financing homes for the majority of American families gradually became more and more impersonal and commercialized. Thus, before World War II, most American homes were built one-by-one, and financed by local institutions, especially by our so-called thrift institutions -- mainly cooperatively owned Savings and Loans and Mutual Savings Banks. That began to change right after the Second World War, with the passage of the G.I. Bill and the rapid expansion of tract home building, in suburban areas, financed with the aid of a variety of government subsidies. American war veterans, our so-called "GIs", could obtain government-guaranteed financing of the homes they needed for their "baby boom" families, with little or no down payment. Nevertheless, such loans were very carefully underwritten and generally retained on the balance sheets of the financial institutions that created them. There were no so-called ARMs (adjustable rate mortgages) or GPMs (graduated payment mortgages) which evolved much later, in the last half of the 20th century.

Then, during the last quarter of the 20th century, the channels for financing America's housing expansion began to multiply, widen and lengthen their reach – far beyond the local institutions that traditionally had originated, held and serviced the mortgages Americans needed to finance their homes. What was once known as our "conventional 30-year fixed rate mortgage", with its strict underwriting standards and twenty percent down payment, began to lose market share to a host of newer and much more accessible kinds of mortgages. Innovative U.S. lenders developed and introduced a growing variety of variable and adjustable rate mortgages (VRMs and ARMs), featuring lower initial interest

rates and smaller down payments than conventional mortgages. Those floating rate mortgages were keyed to a variety of short-term market indexes which exposed homeowners to interest payment risks whenever interest rates moved upward.

During this phase of the U.S. mortgage market's evolution, the traditional twenty percent down payment also slipped downward toward lower and lower levels, heightening the mortgage default risks facing lenders. That risk, in turn, was cushioned for lenders via the development and expansion of both private and public mortgage insurance (PMI) programs. The private mortgage insurers would, for a fee that was added to the borrower's monthly payment, insure the lender against losses occasioned by homeowner defaults.

Those services of truly private mortgage insurers were strongly complemented by the rapid growth of both government-owned mortgage insurers, such as "Ginnie Mae" (The Government National Mortgage Association), and by government sponsored but privately-owned companies such as "Fannie Mae" (The Federal National Mortgage Association) and "Freddie Mac" (The Federal Homeowners Mortgage Corporation). Both of the latter entities operated as private stockholder-owned corporations, but with an implicit government guarantee of their solvency. Those institutions are known in the U.S. as Government Sponsored Entities (GSEs). The two above mentioned GSEs, Fannie Mae and Freddie Mac, then gradually evolved into America's largest insurers and buyers of U.S. mortgages in our rapidly growing secondary mortgage markets.

To finance their enormous holdings of such purchased mortgages, Fannie and Freddie also became America's and the world's largest issuers of so-called mortgage backed securities (MBSs), in competition with many truly private competitors in the secondary mortgage markets. And, because of the implicit government guarantee of their mortgage-backed bonds (MBSs), the GSEs enjoyed a competitive financing advantage that enabled them to evolve into the world's two largest mortgage companies. Unfortunately, however, they also were permitted to base their growth on a very thin capital base. In fact, just before they failed and were taken over by our government, Fannie and Freddie were operating with only about two percent capital on their balance sheets, equivalent to roughly fifty-to-one leverage. By way of comparison, under U.S. commercial banking laws, any insured commercial bank operating with only two percent capital would be subject to early closure by the FDIC under our 1991 Federal Deposit Insurance Corporation Improvement Act (FDICIA). Unfortunately, Fannie and Freddie were not required or expected to operate under such tight capital and leverage constraints.

Another important and ominous trend that developed in the U.S. mortgage markets during the last quarter of the 20th century was a gradual and persistent erosion of basic loan underwriting standards. Until the late 1980s and early1990s, Fannie Mae, Freddie Mac and private mortgage insurers all required mortgage originators to adhere to detailed and strict underwriting standards if they expected to insure and/or sell their loans in the secondary market. Those standards included strict down payment protocols, independent property appraisals, careful

credit and employment checks on borrowers, and affordability criteria that put caps on the size of a borrower's mortgage payments as a percent of their disposable income. However, as the 20th century drew to a close, those standards continued to erode, laying the groundwork for the introduction and widespread usage of so-called "subprime" and "Alt-A" mortgages. Many of those mortgages were openly referred to among market participants as "liar loans" -- because underwriters accepted the borrower's "stated income", net worth, etc. -- without verifying their accuracy.

The foregoing secular erosion of required down payments, professional property appraisals, and income and credit verification fueled a persistent and strong increase in U.S. home prices which, in turn, created the illusion of a huge secular increase in U.S. home-equity based wealth. That illusion also fueled the explosive growth of so-called home equity lines of credit, under which some lenders would actually encourage U.S. home owners to borrow as much or more than the total appraised value of their homes, by carrying two or three mortgages at the same time, based on the expectation that continued home price inflation would soon bring such clearly excessive borrowing back in line with reasonable loan-to-value limitations.

Even as the foregoing erosive trends in U.S. mortgage underwriting standards evolved, two additional ominous developments began to appear as the turn of the 21st century approached. One was the growing importance of pure mortgage brokers at the front end of the mortgage processing chain. Such brokers

were pure brokers in the sense that they had little or no capacity to finance and hold any of the mortgages they originated. They were thus purely fee driven and the volume of their fee incomes and profits was only constrained by the housing demands of buyers and by the increasingly lax underwriting standards of financial institutions that willingly acquired and financed the mortgages thus created. Over time, many U.S. banks and thrift institutions unfortunately increased their reliance on such fee-driven brokers. They did so knowing that they could package such poorly underwritten mortgages and move them off their own balance sheets, into the secondary markets dominated by GSEs and some mega banks whose underwriting standards were also becoming increasingly lax. Moreover, by selling such loans while retaining the servicing rights, acting as bill collectors, they could generate fee income from the loans they no longer owned.

The foregoing increasingly lax mortgage origination, repackaging and servicing trends were then amplified and accelerated by yet another wave of questionable financial innovations which, in turn, completed the process of paving the way for today's global financial crisis. That wave, like the tsunamic after-effects of huge subterranean earthquakes, grew out of the development of **tertiary** markets for mortgages, via the creation of financially-engineered products containing poorly underwritten U.S. mortgages plus other kinds of long-term debt instruments. These new products, known as collateralized debt obligations (CDOs), structured investment vehicles (SIVs), etc., were often created by special-purpose hedge funds financed, owned and operated by Wall Street firms such as Bear Stearns and Lehman Brothers. And, while such blended long-term

debt packages were being created and still carried on the books of the major U.S. investment banks, they were funded in a maturity mismatched manner, via overnight borrowings, and by truly miniscule amounts of capital.

At this point in the process, U.S. subprime mortgages originated by fee-driven brokers had first been financed by a bank or thrift institution, repackaged and sold to a mega bank of GSE, and then repackaged again and blended with other kinds of long-term debts into CDOs, SIVs, etc. on Wall Street. As a result, the original homeowner and the investor holding that homeowner's mortgage were already separated by **four steps** as our Wall Street financial engineers prepared their CDOs and SIVs for yet another stage in the global financial infection process that we are now enduring.

The fifth and final step involved finding ways to make such U.S. originated CDOs and SIVs, which turned out to be packages of "toxic assets", seem creditworthy to unsuspecting portfolio managers, all over the world -- in Iceland, Spain, England, Belgium, other European nations, and even here in Switzerland. That was accomplished in two ways, either by persuading poorly managed U.S. credit-rating agencies to label such packages as "AAA" credits, and/or by attaching credit default swaps (insurance) to those packages. As we now know, both the credit default insurance and the "AAA" ratings on such packages of toxic assets failed to provide the protection that stage five mortgage investors expected when millions of subprime and "Alt-A" mortgage borrowers began to default on their payments.

IV. Global Consequences

Thus, what began as a manifestation of America's dream of affordable home ownership for most of our families has, unfortunately, evolved into a global financial nightmare. In its early stages, during the second half of the 20th century, U.S. mortgage market innovations were generally well-designed and controlled. Even though the homeowner-borrower became separated from the mortgage investor, via the creation of secondary mortgage instruments and markets, reasonable underwriting standards generally remained in place until late in the 20th century. The introduction of so-called subprime and "Alt A" liar loans then set the stage for financial engineers on Wall Street to spread U.S. based housing credit risks around the world -- in CDOs, SIVs, etc, much like the current global dispersion of the Swine Flu Virus. Portfolio managers around the world, even here in Switzerland, then redistributed such toxic asset laden U.S. products to their clients - - mistakenly believing that the U.S. credit rating agencies and insurers provided protection against defaults by U.S. borrowers whose homes were financed with such very poorly underwritten loans.

In the U.S., the foregoing five-stage mortgage market infection process has led to the collapse or charter-conversion of all five of our biggest investment banks. It has also caused our central bank and Treasury department to inject hundreds of billions of taxpayer dollars into our mega-commercial banks and the world's largest insurance company (AIG), all based on the assumption that those institutions are "too big to fail" **(TBTF)**, and/or "too interconnected to fail"

(TITF). And our government is still struggling to stabilize its growing list of such **TBTF** and **TITF** institutions.

Throughout Europe, governments in England, France, Germany, Ireland, Spain, etc. are also now immersed in similar struggles to stabilize their **TBTF** and **TITF** institutions. Even in such remote corners of the financial world as Iceland, where all three of its major banks have failed, the global spread of U.S.-originated "toxic assets" continues to deepen the economic recessions facing our trading partners. Also, here in Switzerland -- long admired for its orderly financial markets -- the Swiss government has felt compelled to inject $5.3 billions into one of its largest banks, UBS, an amount equivalent to over $700 dollars per Swiss resident. That, incidentally, is roughly as burdensome, on a per capita basis, as the per capita bank workout costs now being absorbed by America's residents and taxpayers.

V. What Next? Some Near-Term Issues

Based on the foregoing analysis of the U.S. based causes of the ongoing global financial crisis, the next logical question is: What can and should be done to repair the global damage caused by the trillions of dollars worth of toxic assets created and distributed by Wall Street's so-called financial engineers? And, what changes in our financial laws, regulations and market protocols are needed to ensure that such worldwide financial disruptions will not emanate from the U.S., again, in the future.

Let's begin by reviewing what is happening at the ground level source of the crisis in the U.S., where the rates of delinquency and foreclosure on millions of subprime and "Alt-A" mortgages are, unfortunately, still rising. With home prices in most parts of the U.S. still declining, millions of second mortgages and home equity lines of credit are also falling into arrears, adding additional layers of credit problems to the heavily stressed mortgage portfolios of our banks, thrift institutions, insurers and pension funds. Our GSEs, banks, other mortgage lenders and loan servicers are now implementing massive new programs designed to control the incoming flood of U.S. mortgage delinquencies by renegotiating the terms of millions of defaulted mortgages, in the hope that granting such forbearances will help many distressed homeowners avoid foreclosures. Pressures are also building in the Congress and the Obama administration to give judges across the nation the right to force lenders to rewrite the terms of outstanding mortgages by reducing the interest rates on them, and/or the principal amounts owed by the borrowers. Most professional economists, myself included, believe that such judicial "cram-down" approaches to resolving our mortgage delinquency problems would definitely be counterproductive in that lenders would then be incented to implement dramatically tighter controls in underwriting mortgages in the future.

Even without such heavy handed and ill-advised judicial abrogations of mortgage contracts however, millions of distressed U.S. homeowners have been working with their lenders to redo their contracts, voluntarily, by mutual consent of the parties. To date, the evidence of how such reworked mortgages are faring

is mixed, with many homeowners defaulting a second time within a few months after having their payment obligations reduced. The rising rate of unemployment among U.S. homeowners, occasioned by our now 18 month long recession, of course exacerbates the scope of the workout problems facing our mortgage lenders and servicers.

An alternative approach to working with distressed mortgage borrowers that is now beginning to surface involves keeping the delinquent borrowers in their homes as lessees rather than owners. This is accomplished by foreclosing on their mortgages and negotiating leaseback and resale contracts that keep them in their homes as renters. Then, after a number of years during which they continuously meet their lease obligations, they will have the right to buy back their homes for the amounts previously owed on their foreclosed mortgage. There are some important advantages to that approach, vis-à-vis the aforementioned proposed judicial "cram-down" approaches, or other forms of government-mandated abrogations of existing mortgage contracts. The first is that it keeps the delinquent homeowners in their homes and thus reduces the number of vacant properties depressing market prices. It also provides a positive if somewhat diminished cash flow to the lenders, rather than burdening them with the currently onerous costs of maintaining millions of vacant homes which are hard to resell, at any reasonable price, under current market conditions.

The U.S. government is also attempting to address the short-term challenges of repairing our devastated housing markets via a variety of fiscal and

monetary policy innovations. One example, on the fiscal side, involves giving up to $8,000 tax credits to first-time homebuyers with low to moderate incomes, provided they buy a home this year and live in it for at least three years. That, of course, may help rekindle starts of entry-level homes in our housing markets -- but it also adds to the already huge budget deficits being implemented by the Obama administration and its supporters in Congress.

On the monetary policy front, our central bank is also attempting to lubricate the stressed U.S. mortgage markets in two major ways, both of which are fraught with hidden dangers. One is via its recent decision to purchase hundreds of billions of long-term U.S. Treasury securities in an effort to drive down mortgage rates, thereby speeding up the rate at which new and existing homes are moved through our housing markets. The second approach involves the Fed also buying hundreds of billions of mortgage backed securities (MBSs) from various issuers in the secondary markets including, ominously, our notoriously undercapitalized and historically mismanaged GSEs, especially Fannie Mae and Freddie Mac.

Both of the aforementioned monetary policy innovations are fraught with potential inflationary dangers. Since the end of 2007, our Federal Reserve System's consolidated balance sheet has grown from $915 billion to well over $2 trillion dollars. The Fed's leaders acknowledge that this has led to a huge increase in the monetary base of our banking system which could easily fuel a future rapid expansion of the U.S money supply. That, in turn, could grossly

exceed our real GDP growth potential, thereby fueling a resurgence of serious inflationary pressures. The Fed's current leaders assert that such a threat, if and when it surfaces as the economy recovers, can and will be addressed simply by deflating the Fed's balances by selling off the hundreds of billions of assets it has accumulated in the past 18 months. Many experienced Fed watchers, myself included, have serious doubts about how that deflation of the Fed's bloated balance sheet would actually be accomplished. Consider, for example, the problems the Fed would face in disposing of its roughly $30 billion portfolio of troubled Bear Stearns assets it agreed to take as a condition of J.P. Morgan's willingness to enter a forced marriage with Bear Stearns. Does anyone seriously believe that there is a ready market for those assets, just because they once had "AAA" ratings assigned by our now discredited rating agencies. Also, how about the huge AIG loan now on the Fed's books, and potential losses inherent in some of the MBS securities it is now taking on? Finally, if and when inflation reappears in the economy it would be reflected, of course, in rising yields and falling values of the outstanding long-term Treasury bonds the Fed is now massively accumulating. How would the Fed account for the prospective capital losses that would be involved in reselling those long-term bonds in an inflationary setting?

All of the concerns just mentioned about the credit quality and interest rate risks being built into the Fed's burgeoning balance sheet have given rise to a recent movement calling for more transparent audits of the Fed's bookkeeping protocols. As noted by its external auditors in the Fed's just-released 2008

financial statements, the Fed's bookkeeping protocols are non-GAAP conforming under our central bank's in-house accounting manual. Amazingly, under those in-house rules, the Fed's just released 2008 financial statements make no allowance (zero) for any potential loan losses that might be inherent in its holdings of the aforementioned Bear Stearns assets, its AIG loans, etc.

VI. What Next? Some Long-term Issues

As noted above, the U.S. government has now made a series of historically important decisions about its appropriate role in dealing with financial institutions that it has defined as "Too Big to Fail" **(TBTF)** and/or "Too Interconnected to Fail" **(TITF)**. It has also made dramatic moves toward nationalizing huge non-financial institutions such as GM and Chrysler corporation, which will not be addressed here.

Let's begin with a brief review of the history of the two mega-GSEs that have now been nationalized, Fannie Mae and Freddie Mac. Numerous monetary theorists have long warned that the implicit U.S. Treasury guarantee of Fannie and Freddie's solvency was fraught with danger, especially as those companies grew to be the world's largest mortgage buyers, guarantors and issuers of mortgage- backed securities. Congressional advocates of dangerously liberal housing loan policies in the U.S. clearly aided and abetted the explosive growth of the portfolios of both of those GSEs, including their outright purchases of hundreds of billions of low quality and poorly underwritten subprime and "Alt-A" mortgages granted to homeowners who are now living in homes that were far too

expensive for them to afford, given their levels of savings and disposable income. The incompetent former top managers of both of those GSEs earned multimillion dollar compensation packages by excessively leveraging those companies against their capital bases. They also oversaw and implemented a steady erosion of their own mortgage underwriting standards which then set the pattern followed by their non-GSE competitors, such as Countrywide Savings. U.S. Federal law enforcement agencies are now reportedly conducting in-depth studies of bookkeeping irregularities used by the fired managers of those GSEs to justify their highly lucrative and questionable compensation packages. If those GSEs had never been permitted to fund their assets at sub-market rates, thanks to their implicit Treasury backing, much of the fuel feeding the ongoing U.S. housing crisis would never have existed. One of the most important reforms that need to be made to avert future GSE-fueled financial crises would be to plan and implement an orderly phase-out of the existence of Fannie and Freddie, rather than the current policy of making them bigger and bigger. One of the principal tenets of a market economy is that large companies should be properly capitalized and never allowed to base their explosive growth on implicit or explicit guarantees of their debts by the nation's taxpayers.

Another basic question that needs to be resolved, going forward, is how best to deal with other financial companies that are deemed to be TBTF or TITF. In reality, all institutions thus defined by our government are, in effect, GSEs -- as revealed by the massive bailouts that have been undertaken by our central bank and Treasury to keep them from failing and, it is assumed, thereby "saving" the

world's financial markets from an even more serious crisis than is now being experienced.

Logically, there are two ways that can be considered to deal with such TBTF and TITF institutions on a going forward basis. The first option is to prevent them from ever getting so large, relative to their capital bases. Thus, having stronger capital bases would better enable them to absorb large earnings shocks, without needing taxpayer bailouts. If Fannie, Freddie, Bear Stearns, Lehman Brothers and AIG had all been held to the same capital standards of U.S. commercial banks, their managers might not have been able to finance their expansion into the TBTF and TITF ranks of what might best be dubbed **"shadow GSEs."** Roughly speaking, all of those failed entities used leverage of about 50:1, vis-à-vis the average U.S. commercial bank's eight percent capital base involving only about 12.5:1 leverage.

The only basic alternative to identifying and openly labeling all such TBTF and TITF institutions as GSEs, and then holding them to strict and properly measured capital standards, is to subject them to a complex and intense regime of systemic examinations by a new super regulator. As of today, it appears that the U.S. Congress and the Obama administration are moving toward the latter solution. The only question is whether the Federal Reserve or some other newly minted super-regulator will be charged with heading off another round of future systemic failures in our financial infrastructure. Unfortunately, our nation's experience with previous attempts to heavily burden our financial institutions with

more intense governmental oversight, rather than relying on market discipline has, to put it mildly, been less than brilliantly successful.

Finally, it should by now be clear that the root causes of today's global financial crisis can be traced to poorly designed and implemented U.S. public policies attempting to promote near-universal home ownership for most American families. The end result of such policies has been that we now have millions of Americans defaulting on heavily subsidized mortgages that they have used to buy homes which are too large and far too expensive for them to afford, based on their levels of income and savings. Thanks to the shoddy follow-up work of Wall Street financial engineers, the massive failure of such homeowners to service their debts, especially on subprime, "Alt-A" and other poorly underwritten home loans, has now been translated into a pandemic infection of financial balance sheets throughout the world. One can only hope, but not expect, that the right lessons about designing and implementing public programs to promote the noble American dream of homeownership will be gleaned from these costly U.S. experiments in subverting free market forces and traditional mortgage lending protocols.