

Testimony of Robert F. Wescott, Ph.D.
President, Keybridge Research LLC
Washington, DC

Before the U.S. House of Representatives
Committee on Oversight and Government Reform
Hearing on the Financial Meltdown
October 6, 2008

Chairman Waxman and Members of the Committee:

Thank you for inviting me to testify about the financial meltdown on Wall Street. My name is Robert Wescott and I am President of Keybridge Research LLC, an economic analysis and public policy research firm based in Washington, DC. I would like to share with you my observations from an economist's perspective, drawing on my nearly 30 years of experience analyzing and forecasting the U.S. economy, participating in the national economic policymaking process at the Council of Economic Advisers and the National Economic Council at the White House, and researching global economic and financial sector risks, including the Japanese credit meltdown of the 1990s. My comments are focused on three key questions:

- (1) What were the main causes of the financial crisis?
- (2) What are its economic effects?
- (3) What lessons should we draw for public policy from these experiences?

I will concentrate on systemic issues and try to give you a view from 30,000 feet. The first section of this statement lays out the main causes of our current financial problems. The second section briefly traces through the likely impacts of the meltdown on the U.S. economy. The third section offers my views on the implications of these developments for public policy. The last section concludes with some general observations.

I. Causes of the Financial Meltdown

The current financial meltdown in America had a key driving factor — a rapid expansion of credit. It had a key vehicle — the housing market. It had a number of important enabling factors — mainly innovations in the financial sector, the erosion of underwriting standards, and heavy leveraging. Finally it had a trigger event that led to a rapid erosion of confidence in financial markets — the collapse of the investment firm Lehman Brothers in mid September 2008. Some of these factors might have been relatively benign in and of themselves, but their combination proved most dangerous. In essence America's mortgage lending system morphed rapidly from a well understood and reasonably well regulated system with natural checks and balances, into a new system in which some perverse profit incentives brought unintended consequences. The innovations were so rapid that regulators and many managers of financial firms themselves did not fully appreciate the risks they faced.

Arguably the most important contributor was the environment of easy credit that existed in the first half of this decade. In retrospect, we left the monetary policy floodgates open too wide in the 2002-05 period. Easy credit can be a useful countercyclical macroeconomic policy, but if interest rates are kept too low for too long, they fuel asset bubbles. Long after the U.S. economy had recovered from the 2001-02 recession, the federal funds rates remained at 1.0 percent. This allowed mortgage lenders to offer variable rate mortgages with initial interest rates as low as 2.5 or 3.0 percent and these low rates gave many families an inflated sense of their capacity to afford housing. This availability of cheap credit quickly became capitalized in housing prices and led to 10, 20, and 30 percent annual increases in home prices. With housing values doubling and tripling in some regions in the span of just a few years, a housing frenzy developed. Many Americans developed unrealistic expectations and assumed that housing prices could only go up.

This cycle of boom and bust in the real estate market is not unprecedented. I have experienced a few bubbles first hand. For instance, when I was a researcher at an academic research institute in Japan in 1989-90 during the peak of the Heisei Boom, I witnessed property prices in Tokyo and Osaka increase by 50 percent a year. The grounds of the Imperial Palace in Tokyo were said to be worth more than the entire state of California. You simply knew that such trends were neither sensible nor sustainable. Within 10 years property prices in Tokyo had fallen by more than 80 percent.

As we all now know, a similar mania gripped the U.S. over the past several years. By late 2005 and early 2006, housing prices here in the U.S. had risen to the point where virtually all conventional ratio tests that economists use to study such developments—like affordability measures and ratios of housing prices to median incomes—were similarly screaming “bubble.” By the autumn of 2005, we at Keybridge Research were warning our financial sector clients that the U.S. housing sector was clearly in bubble territory and would soon be turning downward. We did not know exactly how sharply prices would fall, but we did warn our clients to expect “double digit” price declines. Other economists were putting out similar warnings.

A second key development was the emergence of a series of financial sector innovations that radically changed the mortgage business. Mortgage securitization—the bundling of pools of mortgages, their underwriting, and their sale to institutional investors—increased liquidity and spread risks with some benefits and some costs. Securitization gave potential borrowers access to whole new pools of savings that were not accessible before. This made mortgage money cheaper. International investors, such as German savings banks and Italian pension funds, lined up to buy the assets. New technology also brought a sharp reduction in the cost of originating mortgages. The growth of the internet and easier availability of information about potential borrowers encouraged mortgage brokers to rely more heavily upon convenient sources of information, such as credit scores, rather than more labor intensive methods. It also made searching for new borrowers easier and less costly, including through bulk email mortgage offerings.

On the downside, these innovations created what economists call an “agency problem.” Since the mortgage originator was no longer going to hold the mortgage to maturity, but rather was going to immediately sell it to a securities firm and collect its fee up front, it did not have a strong incentive to perform due diligence on the loan. Lenders began loosening standards to remain competitive and increase market share. This development led to a relaxation of down payments and a proliferation of unconventional mortgages, including teaser rate, “no doc”, and option payment mortgages that expanded access to the housing market to less qualified home buyers. Homebuyers were no longer required to have 20 percent “skin in the game” with their house – raising the initial loan to value ratio, a critical predictor of default risk.

Another major change was the increase in leverage by investment banks and other major financial institutions. Whereas a traditional bank might have a leverage ratio of 4, meaning that the value of its obligations was four times the value of its shareholders’ equity, investment banks increased their leverage ratios to 30 or 35 in the past few years. Such high leverage ratios meant that there was much less of a cushion in hard times. Some of these firms had shareholder equity in the tens of billions of dollars, but total obligations of a trillion dollars or more. With only moderate losses, such a firm’s shareholder equity could be reduced to zero and the firm would be forced into bankruptcy.

How Incentives Played Out

How did these ingredients mix? How did the incentives play out? The combination of easy credit, financial market innovations, and financial leveraging led to the massive housing bubble described above. This is evidenced by a nearly unprecedented shift in household wealth allocation—between 2000 and 2007 the share of household assets in real estate jumped by 8 percentage points. However, a system emerged in which most key actors in this story had strong incentives to keep doing what they were doing, even as the sector became more unbalanced. This was more by accident than by design.

- Existing homeowners saw the value of their homes increase. They felt wealthier, which encourages additional consumption. Financial innovation made it easier and easier to use their homes as ATM machines and extract wealth via home equity loans and cash out refinancing. According to research by former Fed Governor Alan Greenspan and James Kennedy, Americans were extracting hundreds of billions of dollars in home equity a year out of their homes during 2004-06 and using these funds to boost their consumption by about 4 percent a year beyond what they otherwise could afford from their incomes.
- New home buyers were lured in by the prospect that a home could not fail to appreciate. Given the easy availability of cheap credit, mortgage lenders encouraged home buyers to buy as much house as they could afford via low short-term interest rates. Some unscrupulous mortgage lenders encouraged buyers to buy more house than they truly could afford, knowing that no matter how things ended they would receive their fees up front. Even though some borrowers knew they could not afford their variable rate mortgage after the teaser rate ended, they proceeded with the transaction anyway. Assuming that the rapid appreciation in home prices

would continue, these subprime borrowers reasoned that they could always sell their home before the interest rate reset and turn a healthy profit in the process.”

- Investors and speculators were encouraged to jump into the housing market and make short-term profits by flipping houses. Historically, roughly 3 percent of all houses nationally are bought for investment purposes. During the 2004-06 period, as much as 25 to 35 percent of house in hot real estate markets – such as southern Florida, Las Vegas, and California – were bought by investors and speculators.
- Investment banks and companies that securitized mortgages used financial engineering to repackage pools of mortgages into securities of different credit ratings. A pool of mortgages that originally might have been rated BB+, for example, might have been converted into one piece that was rated AA, another piece rated AA-, and a third piece that was below investment grade (called “toxic waste” in industry terms). This toxic waste was often kept on the investment bank’s books for future disposal. The firm was making enough money from the synthetic upgrading of some portions of the pool that the toxic waste was considered a cost worth incurring.

As long as home prices kept appreciating steadily and foreclosure rates remained low, all players in this system had a strong incentive to keep doing what they were doing. And there were strong benefits to the economy. There was booming construction of new homes and job growth, soaring consumer spending fueled by mortgage equity extraction, asset appreciation for the new home buyer, hefty mortgage origination fees for the mortgage broker, great business for rating agencies, and large securitization fees for the investment bank. Even speculators with an inability to make mortgage payments after the teaser loan period came out ahead because of the home price appreciation. The home price appreciation in their first 6-12 months would pay off the mortgage, cover real estate agent fees and transfer taxes, and still leave some money left over.

The Problem—What Happened When Housing Prices Stopped Rising and Started Falling

By early 2006, the U.S. housing market had simply reached a saturation point. After years of record home building by the U.S. construction industry, fueled by easy credit conditions, almost everyone who wanted a new home already had one. Competition among lenders intensified as qualified borrowers became more scarce – igniting a “race to the bottom” that was fueled by eroding lending standards for individuals that were not financially prepared for homeownership.

Meanwhile the booming economy started to raise inflation fears and the Federal Reserve had to begin to raise interest rates sharply. As interest rates increased, housing affordability declined – putting additional downward pressure on the housing market. In addition, adjustable rate mortgage issued in 2004 and 2005 were starting to reset, typically requiring monthly payments to increase by \$300 or more per month. All these developments caused housing activity to retrench sharply and housing prices began

to fall. Some borrowers, especially sub-prime borrowers, began to miss monthly mortgage payments. The value of sub-prime mortgage portfolios began to decline noticeably.

Why was this problem not simply contained in the sub-prime sector as many analysts at the time expected? First, the housing sector itself went into a normal housing recession, with housing starts on track to decline by half. With housing accounting for about 5 percent of U.S. GDP, this housing recession by itself was not sufficient to cause an outright economy-wide recession, but it did cause GDP growth to fall from about a 3 percent pace to about a 1.5 percent pace. This resulted in an initial tranche of rising unemployment and declining consumer confidence. Second, home price declines undermined the financial health of American households by more than many realized. By early 2008, more than 10 percent of all American households owed more on their mortgages than their houses were worth — that is, they were “under water”. This hurt consumer confidence further and caused consumption spending to weaken. Auto sales and consumer durable purchases, for example, began to suffer. Third, default rates began to increase for both the Alt-A and prime mortgage markets — the market segments of higher quality mortgages — and caused growing concerns about all mortgage backed securities.

This series of events set the stage for the financial and liquidity crisis that we face today. The collapse of Lehman Brothers in September was effectively the “pinprick” that burst the bubble — an event common to all financial crises which signals severe weakness in the system, shakes market confidence, and set off a vicious circle of unwinding, deleveraging, and tightening credit conditions. Lehman was one of several firms with excessively high leverage ratios and heavy exposure to mortgage securities. Its financial position was more vulnerable than expected because as the widespread withdrawal of liquidity began to take hold and its limited capital base prevented it from covering its debt obligations — forcing it into bankruptcy. Contributing to the downfall was a lack of transparency due in part to weak regulation and overly complex financial instruments.

II. Likely Impacts on the U.S. Economy

The financial crisis comes at a time when the American economy was already highly vulnerable because of high energy prices, stagnant real incomes, and persistent job losses since the start of the year. As a result, there is a high probability that the financial crisis will help tip the economy into a formal recession. The unemployment rate is virtually certain to be higher than it otherwise would be because of the financial crisis. One key impact of the crisis will be on consumer spending. The natural correction to the 2004-06 phase when consumers were “over consuming” through equity extraction from their homes is a phase of “under consumption”—a period when households hunker down and restore their saving rate from the current near zero levels to the historically normal range of 5-7 percent. This correction was likely whether there was a financial crisis or not, but now it is likely to be more noticeable. A second key impact will be on consumer confidence. Worries about the value of one’s life savings and even the security of one’s money market account will likely have knock on effects on consumption. Third, the loss of financial wealth will have a negative impact on consumption. Economists typically find that for each dollar of lost financial wealth, consumption drops by 3-4 percent. This means, for example, that a sustained \$100 billion loss in capitalization of the stock market would be

expected to cut consumer spending by at least \$3 billion in the first year after the decline. With consumer spending representing 70% of U.S. GDP, the net impact of these different factors could be severe.

The crisis is likely to have negative effects on business activity as well. Many small businesses are heavily dependent upon bank lending for commercial and industrial loans—to add to capacity, add workers, or upgrade equipment. Such lending is already being reduced as banks tighten credit standards. Larger businesses tend to source more funding in the credit markets and will almost certainly face tougher conditions as well. They also can be expected to delay hiring and postpone investment projects if the financial crisis reduces their ability to borrow. Finally the government sector, and especially the state and local government sector, is likely to be hurt. Many states, like California, raise funds in the credit markets to smooth out the lumpy timing of tax collections and may be forced to make layoffs if they cannot gain borrow on schedule.

III. Implications for Public Policy

Macro Policy

Monetary and fiscal policies have already been used heavily in 2007 and 2008 to try to provide a countercyclical boost to the economy, but further room exists for additional measures to mitigate the depth and duration of a possible recession. Bond yields on U.S. Treasuries need to be monitored carefully, however. There can be a point at which budget deficits are so large that they cause private investors to lose confidence in a country's fiscal management. A noticeable jump in government bond yields would indicate that a government's credibility is at risk, and at that point countercyclical fiscal policy could actually hurt more than it could help. The challenge for monetary policy is to ease credit conditions to encourage business investment and consumer spending for durable goods when the economy is in a recession, but then to move quickly to a neutral monetary policy—say a real federal funds rate in the range of 2 to 3 percent—as soon as the economy begins to generate positive job growth again. I believe that we will face tough economic times in coming months, but I remain optimistic about the resiliency of the U.S. economy and about its long-run growth prospects.

Regulation

Achieving the proper balance for regulation, of financial markets or anything else, requires a delicate touch. If we over-regulate our markets, we will discourage useful and productive investment. If we under-regulate our markets, we can end up with markets in which no investors will have confidence and productive investment and innovation will wither. In either case we will suffer significantly lower living standards over time. What we need to strive for is smart regulation—regulation that adapts to changing technology and changing circumstances. In some ways it appears that the pace of financial regulation fell behind the pace of financial innovation in recent years. We need regulators to fully understand the risks that financial institutions face.

There were two key failures of regulation in the recent financial meltdown. First, regulators allowed financial firms to employ levels of leverage that were simply too high and they did not force the firms to consider logical systemic risks. As long as times are good, the economy is growing, and financial asset prices are stable, high leverage ratios allow high profits to be earned. Financial institutions, however, will always be faced with less than perfect conditions in any 5-7 year window. Either there will be a recession or a bout of unanticipated inflation or a collapse of commodity prices or a stock market contraction. Leverage ratios have to be restrained so that a firm can earn fair profit in the good times while ensuring that it can survive the bad times. And firms should be pressed to stress test their portfolios on realistic risks, including not just mean reversion assumptions, but with assumptions of overshooting on the downside of a correction.

The second key failure was that regulators lost their way on the path to transparency. Transparency requires that knowledgeable market participants, investors, and regulators fully understand what obligations and benefits a particular financial asset represents. However, financial instruments that the investment banks created were often so complex that they could not be fully understood by regulators and firm managers alike. Sometimes mortgage assets were sliced and diced—packaged and repackaged—4 or 5 times based upon complex statistical rules and obtuse valuation formulas. Regulators need to insist that all instruments offered for sale to the public be able to be understood and logical to knowledgeable professionals.

One of the key lessons from the Japanese credit meltdown in the 1990s is that delays in disposing of bad assets can cripple an economy for a long time—for roughly a decade in the case of Japan. There is a clear tension between this lesson and natural worries that tough “mark to market” rules for financial instruments could exacerbate the problem and compound the damage from the unwinding process. Any change in position to relax mark to market rules must be approached cautiously. In normal times these rules provide for logical accounting of an instrument’s value. However, in a cataclysmic economic or financial downturn, it is very possible for these rules to give a pro-cyclical bias to public policy. That is, forcing a synthetic calculation of an asset’s value in a non-functioning market may cause a valuation to be artificial and may compound the damage. If there were to be a modification of rules, it would be logical to do this on a temporary basis as a test with a through review.

Derivatives

There has been a lot of debate about the ability of financial derivatives to spread risk among many players, both within the U.S. market and also globally. Former Federal Reserve Chairman Alan Greenspan and others have frequently stated that these instruments make our financial markets better able to handle risk and therefore safer. I would agree that these tools can help to offload idiosyncratic risk. For example, if one automobile company were to default on its bonds, credit default swaps could help to ensure that pension plans that held those bonds could have effective insurance and that the retirees supported by those plans could be protected from losses. Even in moderate downturns, such as the 2001-02 recession, the supply of credit to the economy remained unhampered and arguably helped to make that recession unusually mild. In fact, the experiences with derivatives during the recession of

2001-02 may have given investors and regulators a false sense of security and encouraged riskier behavior later.

I think the lesson of the past months, however, is that the massive use of financial derivatives has increased systemic risks in more severe episodes—in, for example, a global financial meltdown as we now appear to be experiencing. That is, up to a certain stress point, interlinked financial instruments can lead to improved risk-return outcomes. The stress point comes when multiple well-regarded financial institutions suffer losses of confidence and fail. In truly exceptional times and with truly large scale risks interlinked financial instruments can actually increase risks. Financial regulators need to wrestle with this issue and try to identify appropriate regulatory standards. In the face of uncertainty, it appears that less leverage and proportionally higher capital bases is one way to reduce systemic risks in the future.

IV. Concluding Observations

The current financial meltdown resulted primarily from two factors: 1) excess liquidity in credit markets in the first half of this decade and 2) excessive leveraging among large investment banks and other financial institutions. When housing activity that was clearly unsustainable declined as credit conditions were tightened, some important financial firms, like Lehman Brothers, found that they did not have enough capital to absorb decreases in the value of their obligations. Both public policymakers who regulated the credit markets and private-sector executives who made aggressive risk-return decisions share responsibility for the current financial crisis.

Anytime the price of a major asset class or commodity increases by 200 or 300 percent in a matter of just a few years—whether it is home prices, timber, Dutch tulips, oil, gold, or technology stocks—prudent regulators and private executives who want to maximize their shareholders' value over the long term need to ask whether the system they regulate or their business model could tolerate a rapid return of that price to its historical trading range. Activities that could not withstand such a “reversion to mean” test are prime candidates for modification or a review of the regulatory environment.

That said, the creation of wealth in capitalist societies has never been simply incremental and steady. Sometimes the massing of capital for certain activities leads to technological breakthroughs or Schumpeterian progress that can be worth the temporary cost of unwinding the “over investment.” One could argue, for example, that despite the losses suffered during the “dot.com” bubble in the year 2000, the information revolution that it brought about is contributing in important ways to the quality of life and has improved American living standards in important ways.

Robert F. Wescott, Ph.D.

Robert F. Wescott is President of Keybridge Research LLC, an economic and financial research firm in Washington, DC, that has served G-7 governments and major financial institutions and companies since 2001. Dr. Wescott concentrates on global economics, financial risk analysis, and public policy research. He serves on global asset allocation committees of well-known international financial firms, chairs a European G-7 finance ministry's board of international advisers, and is a regular speaker to business and financial audiences around the world. From 1999 until 2001, Wescott served as Special Assistant to the President for Economic Policy at the White House. During 1993-94, Wescott was Chief Economist at the President's Council of Economic Advisers, where he developed the Administration's U.S. macroeconomic forecasts and performed policy analysis.

From 1994 to 1999, Wescott was Deputy Division Chief at the International Monetary Fund. In the IMF's Research Department he helped produce the *World Economic Outlook*, the Fund's semi-annual review of world economic and financial prospects, key risks, and policy challenges. Between 1982 and 1993 Wescott was Senior Vice President and Chief Economist at WEFA Group (now Global Insight, Inc.), the economic forecasting and consulting firm, where he oversaw all forecasting, economic modeling, consulting, and research activities for the U.S. Group. Before that he managed the firm's Global Economic Outlook Committee and coordinated the firm's international forecasting from centers in Philadelphia, Washington, Toronto, London, Rome, Frankfurt, and Tokyo. In 1989-90, Wescott lived in Japan, where he helped the University of Pennsylvania establish the International Center for the Study of East Asia Development (ICSEAD) in Kitakyushu, which does quantitative economic modeling and research on East Asian economies.

Dr. Wescott has published research papers in the areas of fiscal policy, global saving patterns and interest rates, exchange rate determinants, money and banking, the credit crunch in Japan, energy policy, energy modeling, inflation targeting, and economic development, especially issues related to globalization. Wescott holds a Ph.D. in Economics from the University of Pennsylvania, 1983.