

MELTDOWN

**Will global markets feel the heat from the U.S. subprime conflagration?
“This could be a major event,” says one expert.**

BY JOHN RUBINO



The eerie thing about the U.S. subprime mortgage implosion is its familiarity. “It’s the same as with junk bonds and the savings & loans,” says Michael Lewitt, president of Hegemony Capital Management, a Florida-based hedge fund. “A financial product gets invented, the regulators don’t do anything about it, and the banks or whoever’s selling it push it until it breaks. In the meantime, it distorts some part of the economy—in this case, residential real estate.” Just how far those distortions will extend into the U.S. and global economy, only time will tell. But whatever its ultimate impact, the story of subprime’s rise and fall is a classic.

BIRTH OF A BUBBLE

Once upon a time, a home loan was a serious thing. Mortgage lenders required that a borrower have both adequate income and a big down payment, and borrowers planned on writing monthly checks for decades in order to eventually own their home free and clear.

This business model protected bank capital but limited the pool of potential homebuyers, which, of course, grated on many players. Renters of modest means still wanted their piece of the American dream. Lenders and homebuilders, like all sales organizations, wanted to move as much product as possible. And U.S. politicians of every stripe loved the idea of homeownership because property owners tend to vote for incumbents.

In short, a lot of people wanted to give low-income Americans home mortgages. And starting in 2002, they got their wish. The double whammy of the technology stock crash and the World Trade Center attacks led the U.S. Federal Reserve to slash short-term interest rates, thus making mortgages more affordable for low-income buyers. This event alone would have given the housing market a nice pop. But then, a series of financial innovations opened the floodgates:

SECURITIZATION AND CREDIT INSURANCE Traditionally, banks that wrote mortgages expected to carry most of them to maturity while earning the difference between the monthly payments and what it cost to fund the loan. This system both limited banks’ available capital and made them careful, from which came their demand for adequate income and big down payments.

Enter securitization. Back in the 1980s, Wall Street discovered that disparate loans of variable quality could be bundled into asset-backed securities (ABS) and sold to institutional investors worldwide. Packagers such as Fannie Mae (the Federal National Mortgage Association) and Freddie Mac (the Federal Home Loan Mortgage Corporation) began buying mortgages from banks and turning them into high-grade bonds, which gave the banks more cash to lend and increased mortgage availability.

To make mortgage-backed securities palatable to risk-averse pension funds, Wall Street then created credit default insurance, also known as credit default swaps (CDS), through which a hedge fund or investment bank guaranteed the loans in a given MBS against default.

It worked. The combination of low interest rates, securitization, and credit insurance created a powerful feedback loop, with easy money keeping defaults low (because someone was always willing to buy a house when the owner couldn’t make the mortgage payments) and low defaults making credit insurance hugely profitable. Hedge funds discovered that they could borrow to write CDS and thereby gear their capital prodigiously and produce massive spreads.

And here’s the crucial part—the securitization machine could process low-quality debt just as easily as it could high-quality debt. The engineers simply tweaked the MBS “enhancements” to produce investment-grade bonds as if by magic. Suddenly, the vast untapped world of low-income/bad-credit homebuyers (i.e., the subprime market) was a source of raw material for the investment-grade bonds craved by money managers the world over. In effect, securitization allowed the funneling of effectively unlimited global capital into U.S. housing.

By 2004, mortgage banking had changed almost beyond recognition. Lenders that once held loans to maturity now simply wrote them and sold them off, frequently in a matter of weeks. Debt had become a fungible commodity, like copper or wheat, and banks began creating as much of it as possible. “The real story of this cycle is that upwards of 80 percent of the loan production of the past five years has been securitized and sold,” notes Christopher Whalen, senior vice president and managing director for Institutional Risk Analytics, an investment consultancy unit of Lord, Whalen LLC based in Hawthorne, CA.

THE RISE OF SUBPRIME LENDERS With deal flow now more important than credit analysis, a new breed of player, unburdened by lingering institutional caution, took the field. Units of nonbank companies, such as General Electric and H&R Block, piled in. British bank HSBC created a U.S. subprime division that gobbled market share at virtually any price. And a generation of high-velocity lenders, such as New Century Financial and Accredited Home Lenders, began contracting with thousands of independent mortgage brokers to generate a tidal wave of product.

On the packaging side, such traditional players as Fannie Mae, Freddie Mac, and the FHA (Federal Housing Administration) were crowded out by more aggressive investment banks, such as Bear Stearns and Merrill Lynch. “The subprime

mortgage explosion was almost all related to the private-label securities market,” says Tom Lawler, a housing consultant based in Vienna, VA.

EXOTICA The surge of global capital into the U.S. housing market had the predictable effect of driving home prices higher. But higher prices impede deal flow. So, once again, the financial engineers designed a solution—this time, in the form of “exotic” loans that required no down payment or allowed borrowers to pay only the interest or to skip payments altogether. Stated-income loans or “liar loans” (also known as “low-doc,” “no-doc,” and “Alt-A”) allowed borrowers to simply claim a given income. “Silent seconds” or “piggyback” loans enabled people to borrow more than 100 percent of a home’s value in two pieces at closing. And all of the above came with tantalizingly low initial teaser rates. “Homebuyers were primarily qualified at the introductory teaser rate rather than the fully amortizing rate, which for many buyers was the main reason they were even qualified in the first place,” says Credit Suisse housing analyst Ivy Zelman.

Lending standards, in short, virtually ceased to exist. “Seven or eight years ago, hardly anybody made loans to people with worse-than-average credit scores with little or no money down and not documenting their income. It just wasn’t done,” says Lawler. By 2005, not only was it done, but it was a growth market. Because home prices were rising and refinancing opportunities abundant, ABS containing exotic

and subprime mortgages performed as well as their conventional predecessors. Such paper was actually *better* because it carried higher rates and required less due diligence.

And so the subprime bubble entered the wacky-anecdote stage. There was the graduate student with an annual income of US\$20,000 who qualified for a US\$600,000 mortgage, the immigrant strawberry pickers earning a combined US\$600 a week who borrowed US\$720,000, the California trailer park where each lot was worth more than US\$1 million, and of course, this bubble’s form of day traders: the regular folks who quit practicing law or gardening to speculate in condos.

Add it all up—easy money, lax lending standards, and insatiable demand for mortgage debt from securitizers—and subprime was off to the races. Its overall share of the mortgage market doubled to about 20 percent between 2001 and 2006, as shown in Figure 1. Low-doc loans soared to 46 percent of all subprime mortgages. The average subprime home purchase in 2006 had a 94 percent combined-loan-to-value (CLTV), meaning a down payment of only 6 percent. And three-fourths of those loans were 2/28 adjustable-rate mortgages (ARMs), which carry low rates for two years and then jump to much higher levels. Together, subprime and Alt-A loans accounted for nearly 40 percent of U.S. mortgages originated in 2006.

All this money flowing into places where it used to be scarce had the predictable effect: Both the percentage of U.S.

BAILOUTS AND REGULATIONS

Like all bursting bubbles, subprime’s collapse has panicked those whose job it is to “do something.” Mortgage lenders and investment banks have an obvious stake in containing the damage. And U.S. federal and state governments fear an army of dispossessed former homeowners roaming the countryside and voting for change. So, the solutions are flying fast and furious.

Freddie Mac is offering to buy US\$20 billion in subprime mortgages, although what it intends to do with them is unclear. Bear Stearns’ EMC Mortgage has created a “Mod Squad” loan-workout team that travels the country helping borrowers avoid default. And Washington Mutual has pledged US\$2 billion to help its subprime borrowers refinance into fixed-rate loans. More banks are announcing similar programs daily.

At the state level, Ohio is offering to refinance subprime ARMs with 30-year fixed-rate loans, and in mid-May, Florida’s legislature was debating various homeowner tax breaks. Regulators, meanwhile, are pressuring lenders to offer generous workout terms to borrowers. In a joint statement, agencies charged with overseeing banks noted that “existing regulatory guidance and accounting standards do not require immediate foreclosure on homes when borrowers fall behind on payments.”

And, of course, now that the horse has wandered

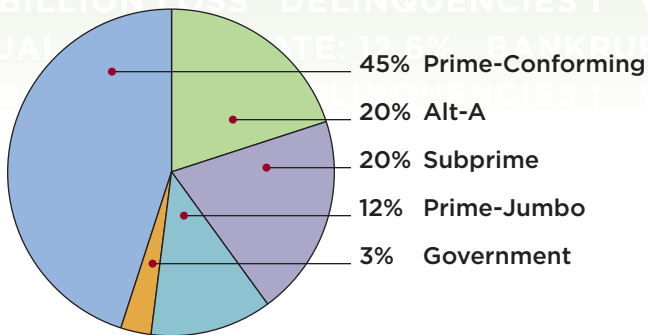
onto the nearby freeway, the U.S. Congress is pressuring regulators to close the barn door. In April, Senator Charles Schumer (D, NY) threatened new banking rules that would “ensure borrowers can repay loans and hold mortgage originators accountable” and proposed giving nonprofit groups federal money to help homeowners refinance.

Will any of this work? If the S&L bailout of the early 1990s is a reliable model, socializing subprime risk will make it easier to bear or at least hide the true costs. But the proposed regulations are unlikely to have much effect—first, because the market is already imposing the previously missing discipline and, second, because most of the egregious lending was done by entities not under regulatory purview. “There aren’t any regulatory fires to put out because most of the risk is held by nonbanks; the regulators really can’t do anything about it,” says Whalen.

But one piece of legislation that might have an impact is Ohio Senate Bill 185, which would prevent certain subprime mortgages originated in that state by nonbank entities from being included in securitization pools. In response, Wells Fargo quickly discontinued its stated income/limited documentation wholesale loan programs in Ohio. “If other states pass similar legislation,” says Zelman, “this could be a major event.”

Figure 1

U.S. Home Purchase Mortgage Originations, 2006



Source: Credit Suisse

families that owned homes and household debt as a percentage of disposable income soared to record levels, as shown in Figure 2.

THE ESTABLISHMENT GETS ON BOARD The powers that be were happy to ride the subprime gravy train. Homeownership initiatives of the Congressional Hispanic and Black caucuses solicited—and received—big donations from subprime lenders, and former Federal Reserve Board chairman Alan Greenspan, who seems never to have never met a bubble he didn't love, opined in 2005, "Innovation has brought about a multitude of new products, such as subprime loans and niche credit programs for immigrants. ... With these advances in technology, lenders have taken advantage of credit scoring models and other techniques for efficiently extending credit to a broader spectrum of consumers ... Where once more marginal applicants would simply have been denied credit, lenders are now able to quite efficiently judge the risk posed by individual applicants and to price that risk appropriately. These improvements have led to rapid growth in subprime mortgage lending ... fostering constructive innovation that is both responsive to market demand and beneficial to consumers."

As for the stock analysts following the subprime lenders, with rare exceptions, the most recent quarter seemed to be all that mattered. According to the *Wall Street Journal*, at the beginning of 2006, 11 of the 12 analysts covering subprime leader New Century rated its stock either a buy or a hold.

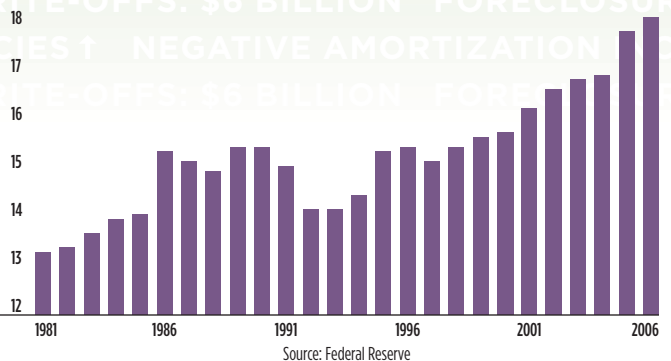
VINTAGE 2006

With the subprime/exotic mortgage boom laid out this way, it's obvious that the bubble was destined to burst. And in 2006, burst it did. In once rollicking markets such as Las Vegas and San Diego, home prices leveled off and started falling. Speculators who needed rising prices to break even began walking away from their deposits, and the cancellation rate for homebuilders spiked.

"Vintage 2006" mortgages suffered a meltdown that is without precedent, many of them defaulting without making a single payment. In February 2007, subprime mortgages defaulted at an annual rate of 12.6 percent, versus 1.5 percent for fully documented prime mortgages. "Home prices have been declining since October of 2005, so a lot of these people,

Figure 2

U.S. Homeowner Debt Service (% of disposable income)



Source: Federal Reserve

even if they do have the money, have no incentive to make a monthly payment because they're already underwater," says economic consultant Gary Shilling, whose firm is based in Springfield, NJ. "They're in 'til the sheriff throws them out."

And all this happened before the 2006 ARMs even start resetting. "The subprime meltdown so far isn't related to rate resets," says Lawler. "The mortgages that have been doing horribly are simply subprime and liar loans that never should have been made."

So, how exactly did these loans get made? According to an April 2007 study by Fitch Ratings, banks writing mortgages in 2006—and the agencies rating the resulting MBS—gave too much weight to borrowers' FICO scores (a measure of past bill-paying regularity), and too little to how much was being lent. As a result, borrowers with a given FICO score got larger loans and were less likely to have their income verified.

This practice is a classic case of modeling based on recent history. "When you have a really strong housing market, documentation or combined-loan-to-value aren't a big deal because home prices are going up everywhere," says Lawler. "So, the major determinant is whether people are good at managing their money, which tends to be the credit score." Because rating agency models were using data from the past decade, when housing prices were mostly rising, they failed to anticipate the impact of falling home prices on overindebted borrowers.

The carnage is far from over. Investment banks, suddenly aware that mortgages aren't fungible commodities after all, are returning the worst of them to the originating lenders, pushing many into bankruptcy. According to the website Mortgage Lender Implode-O-Meter, by mid-June 2007, 76 mortgage lenders, most of them subprime specialists, had disappeared. HSBC's U.S. subprime unit had taken a breathtaking US\$8.8 billion loss on its portfolio. H&R Block's subprime unit had been sold. And New Century was bankrupt.

The surviving players are dialing their lending standards back to prebubble levels, as shown in Figure 3. The problem is that, to do so, they have to own up to the laxity of their 2006 standards. Citigroup, for instance, is cutting back on second mortgages to "some" customers who want to finance 100 percent of homes' values without fully documenting their finances. Option One, a top-10 subprime lender, will no

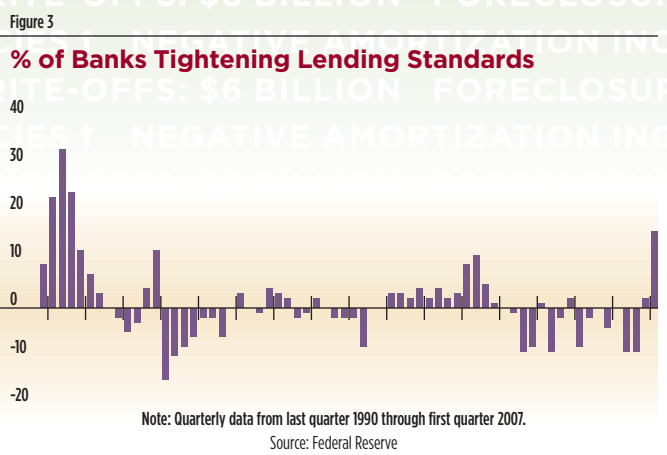
longer write mortgages with CLTVs above 95 percent. Countrywide Financial has stopped offering 100 percent CLTV products. Freddie Mac has stopped buying subprime ARMs that qualify buyers at the teaser rate; from now on, borrowers must be able to actually make the loan payments when the teaser rate expires. The list of amusing policy reversals is virtually endless, but the impact is clear: Far fewer loans will be written to less-credit-worthy borrowers in the future. David Liu, a mortgage analyst at UBS AG in New York City, estimates that subprime lending will decline by as much as 50 percent in 2007.

Meanwhile, those vintage 2006 ARMs are due to start resetting, and many homeowners who expected to refinance before their payments jumped will find that that's no longer an option. The result will be rising defaults for at least another year and, as increasingly desperate homeowners try to sell, home prices that will fall nationwide for the first time since the Great Depression.

SUDDEN IMPACT

The question now is how far the ripples will travel. Moving outward from the point of impact, the waves will reach, first, the homebuilders and, then, the banks, the hedge funds, and the broader U.S.—and even global—economy.

HOMEBUILDERS Think of housing as a food chain. First-time buyers gobble up the starter homes and free those homes' owners to move up to bigger digs, which allows the midrange folks to step up to McMansions. Deny credit to first-time



buyers, and the whole process slows to a crawl. That's today's homebuilding market in a nutshell. With the subprime door slamming shut, first-time buyers are stuck in their apartments, which prevents buyers who would move up from selling their existing homes, and so on.

Ivy Zelman calculates that the combination of tighter lending standards, fewer speculators, and a generally slowing economy will cut home sales by about 40 percent over the next couple of years. Meanwhile, as Gary Shilling calculates, about 2 million too many houses are currently out there: "Starts aren't going to zero to get rid of this inventory in a single year. They'll be depressed for a number of years."

For the homebuilders, many of which borrowed heavily to buy raw land at peak prices, the result is year-ahead land write-offs of more than US\$6 billion, according to Zelman.

CORRUPTION

History teaches that easy money corrupts, and on this count, subprime has lived up to the lofty standards set by the junk bond and tech stock bubbles. Liar loans involve a lot of lying, of course, which in its most common form works like this: An independent mortgage broker takes an application from a borrower of dubious means and calculates ahead of time what income level an underwriter such as New Century would require to make the loan. The broker then instructs the borrower to claim the required income or simply fills in the blank himself. The underwriter winks at this obvious deception because it is merely passing the loan on to the packager, who also winks because the packager is merely processing the loans into bonds and selling them to Asian or European pension funds. The result is a daisy chain of fraud and negligence. One recent study found that 60 percent of stated-income loans were exaggerated by at least 50 percent.

Then there's the scam in which brokers arrange for a buyer to offer far more than current market value for a house. A crooked appraiser signs off on the price, and a complicit mortgage broker arranges the loan.

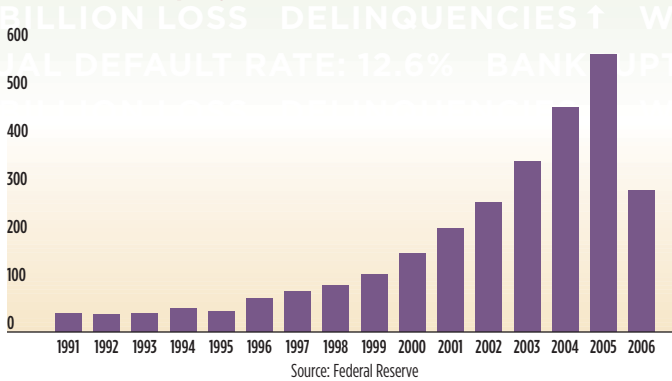
The parties split the overpayment, and the new owner soon stops making payments, forcing the bank to repossess the house. Meanwhile, the inflated sale price raises comparables for the entire neighborhood.

More widespread is the simple browbeating of appraisers to "hit the number" on sales contracts. Ninety percent of the appraisers in a 2006 national survey said they had experienced threats, nonpayment of fees, and other forms of coercion. Many said they had lost business by refusing to play the game.

Then, of course, there's the inevitable collusion and self-dealing between the investment banks serving the subprime lenders and the analysts covering their stocks. UBS and Bear Stearns, for instance, were recently served subpoenas by the state of Massachusetts related to their analysts' upbeat reports on subprime lenders (profitable customers of the firms' investment banking arms) as those lenders were sliding into insolvency. Shocking!

And these shenanigans represent the easy, early corruption. If history is any guide, the really juicy stuff is no doubt still waiting to be uncovered.

Figure 4

U.S. Home Equity Extraction (US\$ billions)

BANKS The idea that subprime is a separate, hermetically sealed compartment is, alas, false. It is part of a continuum running from the sedate to the ludicrous, with a lot of questionable paper in between. Alt-A ARMs, for instance, which are generally written to the stronger borrowers, are seeing for the 2006 Vintage “delinquencies and foreclosures running 3 to 4 times the levels from 2003 and 2004 vintages,” wrote Zelman in a recent report.

In other words, it’s likely that a fair number of nonsubprime mortgages will default, forcing banks to sell tens of thousands of repossessed homes into a depressed market. And that demand for exotic paper from packagers will dry up. “Some banks are stuck with credits they would have normally sold off; the party’s over, and what you have in the conduit you have to keep,” says Christopher Whalen. “Some of this paper is pretty grotty.”

Then there’s the truly fascinating case of pay-option ARM accounting. These loans allow the borrower to skip the occasional payment, with the amount being added to principal. That feature alone gives this product an honored place in the pantheon of truly bad ideas. But it turns out that banks—and this is truly amazing—count the missed payments as *income*, thus allowing them to report massive increases in earnings *on money not received* when the borrowers stop making payments. For some pay-option ARM specialists, the amounts involved are impressive. Countrywide’s “negative amortization income,” for instance, jumped from US\$75 million in 2005 to US\$654 million in 2006.

What the coming wave of subprime and exotic defaults means for a given bank depends on the bank’s business model. For the single-line subprime specialists, the near-term future is challenging, to put it mildly. For the multiline lenders, such as Wells Fargo and Citigroup, the subprime meltdown might be only a speed bump. Assuming their commercial real estate, trading, and merger & acquisition work continues to thrive, they may actually benefit from buying up busted loans from weaker mortgage lenders at fire sale prices.

As for the big investment banks, not to worry. As Ken Heebner, manager of the CGM Realty Fund, recently told an interviewer, “The brokerage firms created securitization; they know the products are toxic, and they simply passed them on to everyone else. Deal flow might slow down, but I don’t think they’ll suffer losses.”

HEDGE FUNDS Because mortgage defaults were so low during the bubble, the price of CDS plunged in 2005 and 2006, according to Whalen, to about 5 percent for each year of coverage. “The bet was that they’d stay this low indefinitely,” he says. “[But now] you have a portfolio that’s likely to see 20 percent defaults over the next 12 months.”

Unlike traditional insurance companies, hedge funds don’t reserve for future events. “If they don’t have any defaults this year,” says Whalen, “they’ll take the five points they got paid into income.” This practice is fine while defaults are low, but it leaves them exposed if defaults spike. “Say we revert to the mean and the portfolio is throwing off 10 percent defaults; [hedge funds] are looking at a huge loss,” he says.

Hedge funds are also big buyers of the “equity” tranches of mortgage-backed bonds, which absorb the first losses from defaults in the bonds’ underlying mortgages. Before 2004, investment banks tended to keep these toxic tranches as a cost of doing business. “But in 2005, they began selling the equity pieces to hedge funds,” says Whalen. And because the hedge funds use borrowed money to gear their returns, here again, the impact of defaults will be magnified by leverage.

THE U.S. AND GLOBAL ECONOMIES Because U.S. consumers have been driving global growth and home equity extraction (see Figure 4) has been driving U.S. consumption, the housing downturn has enormous implications for the whole world. Add in the loss of jobs in construction and mortgage banking, and you get a major drag on U.S. GDP, which explains its recent weakness.

But this slowdown comes at a time of unprecedented global liquidity, with corporate M&A and stock markets around the world breaking records on a daily basis. As a result, investment banks and other leveraged speculators have hardly missed a beat. The global economy is still growing, and the subprime mess appears to be well contained. “Many people will lose their homes, and there will be losses, but those losses are very dispersed—a lot of it outside the United States—so it won’t have a monumental impact on the U.S. economy,” says Hegemony’s Michael Lewitt.

Still, a world awash in liquidity implies that virtually everyone is on the same, optimistic side of the of the volatility trade. Even the institutions that buy primarily high grade MBS are leveraging them to raise returns. The assumption is that those tranches won’t default, and that’s probably correct, Whalen observes. But the bonds still might fall in price if spreads between U.S. Treasury paper and MBS widen. Whalen asks, “Does pervasive spread risk mean that financial institutions and investors are headed for a macro event, a one-time outward shift in spread pricing that exceeds the assumptions employed today in most risk models?” If so, the liquidity glut could become a credit crunch virtually overnight. **■**

John Rubino, a former financial analyst, is the author of How to Profit from the Coming Real Estate Bust and Main Street, Not Wall Street.