

Commissioners Meeting—9/1/10

Comments on draft areas of discussion

Defining the crisis

- BB: Not sure it's our job to identify the *primary* economic impact of the crisis. The causes were more extensive than the credit crunch following Lehman.
- HM: Better to start with financial crisis, not economic outcome.
- BB: There was a collapse of the housing bubble; it was not that, then failures, then credit crisis. The housing and other bubbles collapsed *led to* a crisis in liquidity and credit crisis, which caused a lot of institutions to fail. I.e., asset values decline; liquidity crisis; credit contracts; financial institutions in trouble (hedge funds, originators declined with the housing bubble).
- JT: Housing bubble, not crisis; when it collapsed it led to liquidity squeeze on originators that securitized loans and other market participants that depended on liquidity; and turned into a credit crisis spreading through to the economy.
- KH: The credit aspect is more a cause than a symptom; in late 2008 through 2010, there are consequences and it's hard to borrow. The severe recession beginning late 2008 is more than trouble accessing credit.
 - JT: Small businesses hire people and run on credit; without credit the economy doesn't work.
 - KH: Agree but that is *one element* of the ensuing recession (add massive loss of confidence as contributing to recession).
- PW: The distinguishing aspect of this crisis is that after Lehman banks stopped lending to one another. That's what scared everybody. John's formulation covered that.
- DHE: The financial crisis was the wholesale shutting down of major financial markets: CP, interbank lending. That's what this set this aside. The *economic* crisis is the very severe reduction in jobs, which was a fallout of the financial crisis, loss in wealth, and direct linkage between construction/housing and the real economy.
- BT: Understanding this interaction would be a good start for building consensus.
- KH: Credit: (1) front-end, firms taking credit for transactions they never should have engaged in; (2) credit shock post-Lehman; (3) one element of the recession that occurs.
- HM: It's difficult to put in these hard breaks. In Nevada we saw some of this going on before; we don't necessarily have to create a hard break so long as we agree on the continuum.

- PA: Mid-2007 through September 2008: Declining prices, declining asset prices, ABCP market getting disrupted, auction-rate securities failures. Was this a liquidity crisis or a credit crisis?
 - Ron: Both credit and liquidity disruption. Securitization markets disruption, etc., resulted in a diminution of credit in the economy.
- BT: Credit – the decline in underwriting, etc. – contributed to the bubble.
- DHE: December 2007 is the peak, which is considered the official start of the recession; January 2008 is the first downturn. That coincides with employment turning.
 - BG: Some start it earlier.
 - BG/BT: Not clear when it ended.
- BG: Why did the recession begin then?
- DHE: Credit diminution now takes a while to be reflected in the economic variables.

Macroeconomic factors

- (Argument that low interest rates, excess liquidity caused excessive flows, etc.)
- HM/PA: Facilitators, not factors.
- DGE/PW: Causal.
- BB: Something can be a contributor and be a kind of cause.
- HM: “Causes” should be unique, differentiating features of *this* crisis.
- JT: You wouldn’t have had a bubble without low interest rates. Agree—how many causes are we going to have? It’s clearly a contributor, seminal, to the bubble.
- PA/HM: “Factor” would be okay.
- BG: We have had periods of low interest rates and easy liquidity without this happening.
- DHE: They *are* a necessary precondition. The standard is, if you take it out, there wouldn’t be a crisis. I believe this meets the standard. PW disagrees; JT agrees; BB isn’t sure—there had to be a lot of money, it didn’t have to come from international flows.
- PW: Stock market bubble in 1999—was it necessary for there to have been low interest rates and huge capital flows, or was it independent?
 - DHE: Yes, it was necessary in that bubble as well.
 - HM: Yes, if that’s the definition, I agree, but then we will end up with quite a few causes.
 - KH: Agree with Doug—there was a credit bubble that was necessary but not sufficient for the housing bubble that occurred. John viewed credit as subset of the housing bubble; I would argue that the credit bubble caused the housing bubble and others as well, for instance in commercial real estate. JT: Agree.

- BG: This is a good way to reach some inclusion. We risk being over-inclusive in our list of causes. We'll have to go back at some point and pick those that are seminal.
- BT: Sufficient; sufficient but necessary; contributing. Different categories. I think the oil bubble in certain regions wreaked havoc.
- PA: How high was the liquidity by historical standards?
 - WE: The level was extraordinarily high. Extraordinary amount of money.
 - BT: The international capital flows were growing throughout; interest rates were at the lowest in a long, long time.
 - RB: This is an academic debate. John Taylor will say it's *not* very out of whack based on the net difference between what's leaving and coming back; if you look at money coming in on a gross basis – the sovereign funds – it's very high and not matched previously.
 - PW: Low interest rates, high inflows – I always thought money goes where rates are high.
 - RB: It's the *relative* rate... also post the dotcom bubble there was a preference for the safe assets, which were agencies and AAA securitizations.
 - KH: It's important to resolve this. They're looking for us to weigh in. BT: Not sure that's our job. KH: Disagree. Taylor says Alan Greenspan caused the financial crisis because he didn't follow the Taylor Rule. We need to weigh in on whether the Fed's policies were to blame, or was it high savings rates in China and India. They're not mutually exclusive. Bernanke says Taylor may be right but the numbers aren't big enough to explain the credit bubble.
 - BGr: The whole world was awash in cash, looking for a safe harbor at a competitive interest rate.
 - RB: World savings was increasing but not as outlandish; increasing from a low level.
 - HM: We can have an opinion, and cite both sides of the argument, without writing an economists' paper.
 - KH: Whether it's Greenspan's fault is one of the most hotly debated item... agree we won't convince all the PhDs.

The housing bubble and its collapse

- HM: We need to address all of these aspects of housing. It bothers me that housing policy is given too much emphasis; I would say it was a factor but not the driving factor at FNM and FRE. If we could phrase it to make it more balanced.
- PA: I don't think CRA was a factor; present since 1977. Affordable housing goals made a difference at the margin with respect to the GSEs, and the GSEs were relevant because of their scale. This was not primary. BB: Agree. JT: Were it not for declining

underwriting standards, we would never have started down this path. We were awash in cash, and that started us down a slippery slope. Housing goals gets us away from what actually happened. It was a factor.

- BT: OTD was the big sin, but who did you originate to disseminate to. The GSEs needed grist for the mill. That drove it. Then everyone jumped in; somebody got clever in the way you could securitize it and everything got carried away. They were critical.
- JT: Government helped create the securitization market; but the bubble was created in part by the private participants jumping in. They had far more capital among them than the GSEs could have.
- BG: This draft doesn't discuss the difficulties created by the private label securities. That to me is the biggest problem with this "housing bubble" description on these pages. BT: The discussion of securitization is meant to cover that. BG: Securitization was driven by more than the diversification of risk. It was driven in large part by the need to generate fees. There was a reduction in standards at every level and a loss of market discipline, resulting in a whole lot of problem that was fallacious, and infected the system with a lot of lousy stuff. Some of it was GSE guaranteed and some of it was in the private market. All of us agree that the housing bubble was a factor. I wouldn't leave the private sector off the hook at all. BT: I agree.
- BT: *Was the mortgage crisis the trigger for the financial crisis?*
 - o JT: Collapse of the housing bubble, yes. BB: Agree with John.
 - o PA: Credit extended where it shouldn't, pushing prices up.
 - o HM: Underwriting standards go first. I would agree that is a *primary* cause of the housing bubble. Most of us could probably agree on that.
 - o PA: Agree with most of what is written; but I want to be clear—the GSEs were contributory but not primary. When I think of housing policy, I think of the mortgage interest deduction. I don't see anything that tipped. I don't see those as driving forces. It wasn't just investors demand, it was the people pushing the products. Not everything being pushed was predatory; there was pull, and there was product push.
 - o BT: Just cross out "government policy... activities of GSEs."
 - o BG: Promotion of product without regard to consequence. Loss of market discipline. This was product that didn't deserve to be sold.
 - o JT: I don't accept when they say, "somebody made me do it."
 - o HM: "Thirst for growth."
 - o BGr: Disagree that standards declined due to investor demand for mortgage-related debt. It's counterintuitive that they would want a lower-quality product. The originators had a strong incentive to increase the volume, and they did it in part by the lowering the standards, and then they were able to sell it off to the

next party, who masked the quality of the product, and the investors bought it in part because of the AAA rating.

- o BG: In our rush to securitize, we forgot about our standards.
- “The GSEs have always been standard-setters.” BB: I doubt that is true. They are standard-setters for conforming products. HM: They were followers. PA: But their scale mattered.
 - o PW: Standards were perverted by the affordable housing goals. The documents make it very clear that the requirements required GSEs to reduce the underwriting standards; and FHA did also, to compete with the GSEs. That’s what caused the decline. BT: I agree with Heather’s comment on “filthy lucre.”
 - o KH: I tend to focus on correlation since I can’t prove causality. In the 1990s and 2000s, FHA and GSE policies were changing, and they tended to push in one direction – more home ownership – from both parties. This expansion in housing and the decline in underwriting standards. I know the mortgage interest deduction did *not* change and is probably not a factor; I don’t know of changes in CRA so I have a tough time calling that a factor; but FHA and GSE policies, and the affordable housing goals, I remember those being debated. Tax policy changes don’t strike me as a big deal. BT: Agree on tax policy. KH: The GSEs were the 2-ton gorilla. Whether they were leading or catching up, not sure.
 - o PA: I do think the staff analysis on the differential quality in the mortgages – default rates – were dramatically different between the private sector and the GSEs. But it’s hard to say they’re de minimis because of their scale.
 - o KH: What matters is what the 80% market share player is doing. DHE: Agree. What matters is how their standards declined, over time. I don’t have a clean view on what caused the decline in standards; I’m skeptical about fraudulent practices because of the lack of quantitative evidence. PA: The report on that is coming.
 - o (Question whether Fed’s failure to implement housing standards was causal.)
- BT: FHA got priced out of the market. DHE: They bounced back with zero-down loans.
 - o WE: But they still had a small market share: 3% or so. In 2008 they’re coming back up.
- PA: It was allowed by the regulators that could have stopped it. Whatever caused it, I think we agree there were loans of poor quality in the system. It’s true that a lot of this was celebrated. Folks on both sides created an environment of encouragement. There was a lot of encouragement to reach lower. All these folks, the New Centuries, were there, they were part of the fabric. It was culture not formal policy.
 - o DHE: The rules didn’t change; the way they were pushed changed. The White House in 2001 had minority homeownership day for example.

- o BB: I think certainly the GSEs played a role; but I think securitization was the *primary* reason for the decline in underwriting standards. The increasing profits and demand from the securitizers.
- o PA: The subprime originators had a cultural cover.
- o JT: It's a chicken or egg. Was it the originator, or the demand from the banks to securitize?
- o BT: They started to grow up at the same time.
- o PA: Once you had the system set up you could push the product without consequence. BB: I need more and more product, where am I going to get it.
- o KH: Bush Administration tried to shut down the FHA's ability to offer zero-down mortgages and seller-funded downpayments; everybody loved to take the credit for ownership, but these were some of the lowest quality mortgages out there.
- o PA: I believe Wendy that this in particular probably had de minimis impact, but this may have reflected the cultural underlay also.
- o KH: Nobody was pushing on the Fed to crack down on this mortgage lending because both parties loved that everybody was getting mortgages.
- o PA: Agree; note cultural push shouldn't excuse policymakers if in fact zero-down payment mortgages were crossing the line.
- o KH: I haven't found anyone who stood up and said, stop, this is bad. Anyone saying that was getting steam rolled.
- o JT: The Fed sets itself up as the standard bearer, immune from politics; why didn't they say something isn't right.
- o PA: There were concerns: AGs; Fed did pass rule in 2001; state level.
- *Credit rating agencies.*
 - o WE: All the incentives were aligned.
 - o PA: Everyone's buying and the kids are enjoying the toys; someone still has to see if the toys have lead. The Fed should have been checking these incentives.
 - o BT: Analogy to bipartisan support for veterans.
 - o BB: It's clear to me who started securitization with tranching and all of that. They were the private label securitizers. I do think that the GSEs stepped in kind of late and desperately to try and remedy the fact that they had lost so much market share. It was the big investment banks, the banks, the bank holding companies that were securitizing, and everybody up and down the chain.
 - o PW: You're all very far apart from where I am; I think your facts are wrong. The GSEs began in the early 1990s to buy subprime mortgages well before Wall Street became involved. They bought them throughout the 1990s in increasing amounts because of the affordable housing requirements. There was always some, very small business in subprime. To the extent it was securitized, it was

securitized by Wall Street. The GSEs bought more and more subprime and ultimately Alt-A to meet the requirements. It's clear in the documents. They had to force Wall Street further out on the risk curve because they themselves were buying riskier mortgages to meet the affordable housing requirements. They were the principal starters and they were doing it because of the affordable housing standards. It was HUD's policy to lower the underwriting standards; they forced the GSEs to buy more and more of these through the Clinton administration and into the Bush administration. The reason these loans were getting worse and worse is that there was a buyer in the GSEs. The originators were happy to buy. I don't think anyone else here has looked at the data the way I have. Look at what the GSEs were saying to HUD. They were concerned about how they would be profitable if they had to buy all this stuff. The pouring of money into subprime and Alt-A mortgage didn't cause the bubble but increased the size of the bubble. Bubbles in the past had been four or five years, this one was 10 years, because of the money the government was pouring into the system. The distinguishing characteristic of this bubble was that half the mortgages were subprime. Putting the GSEs in competition with Wall Street, which had been securitizing subprime mortgages in small amounts for many years. The reason shoddy products sold was the artificial demand from the government.

- o HM: Government policies gave ground cover to the argument that everybody was creating bad mortgages. You motivate people and people get motivated by how they are paid. I.e., Fannie Mae. PW: 40% of the mortgages they were buying were subprime. As FHFA said, they were cross-subsidizing from prime to subprime.
- o BT: What is the cure for low blood sugar? BB: Dinner.

Thoughts on macro

- PA: *What were the numbers, how much subprime mortgage activity was refinance as opposed to something else?*
 - o WE: Peaked at 65%-70% of originations; homeownership peaked at ~67% in ~2004.
→ Research will provide basic data on homeownership and the extent of refi, including within the subprime market.
- PA: *Can you determine the purpose of the loan?*
 - o BT: If you used it for consumer purposes, you could not deduct. [There was no enforcement.]

- o WE: Late 1990s, U Michigan did a cash-out survey. It was ~40% for home improvement, 30% to pay off debt, and 30% for consumer spending.
 ➔ Research will provide that report and summarize.
- PA: We need to be careful not to advocate high interest rates. KH: Yes, growth is good, inexpensive capital is good.

Credit rating agencies

- BB: Need stronger language. PA: It couldn't have happened without them. BGr: They validated the creation of the tranches.
 ➔ PW: I had asked for some data from the rating agencies about how they did on non-mortgage asset-backed. Research will provide.
- o PW: What we were shown was just anecdotal.
- o PA: I heard us all agree that they were *causal*. That's a good place to start. Agreed by everyone.
- o PW: Do not agree that we could not have had the crisis without them. The mortgages by GSEs and FHA and under CRA failed; they had the effect of reducing housing prices because they failed. The investors in the GSE securities came out fine, but the mortgages on which those securities were based failed. The rating agencies matter because some of the bad mortgages were the result of the rating agencies' triple-A. We could have had the crisis without the rating agencies.
- o PA: Peter is saying the PLS portion of the market was secondary; you could have had the crisis without the PLS market. While it made it bigger, you didn't need it for the crisis.
- o DHE: Don't agree. PLS were much more important than that because they were one of the ways mortgage risks could be concentrated on balance sheets in ways that were not transparent. Without the rating agencies it's just minor league. You couldn't have gotten the transmission from the mortgage crisis to the financial crisis without the rating agencies; it allowed you to originate all of these mortgages with lower capital standards.
- o BG: This is important. You can flood these institutions with assets that because of their rating resulted in a growth of the institution without the capital growing proportionately. It made the institutions more and more fragile.
- o BGr: And because of the Basel standards, they were sought after because they added to the asset side of your balance sheet.
- o DHE: If the numbers are small, on PLS, I'm willing to be talked out of it.
 ➔ Research will provide data.

- o PW: When those instruments had to be downgraded, that's what caused the financial crisis at the large institutions.
- o DHE: If it's just GSEs, the government picks up the guarantee, and it doesn't transmit (into the financial system). They needed the rating agencies. If the rating agencies had done their jobs and picked up on two key correlations – geographic correlation in house prices, and they failed to remember the housing market is correlated with the real economy.
- o PW: So the argument is the AAA ratings enabled investors to hold these mortgages. And Basel also caused a lot of problems. As I see it, the mortgages made by FNM/FRE/FHA, when those failed, those caused the same mortgages that were underlying the MBS to also fail, and caused people to doubt the quality of the MBS, which is why they got downgraded, and marked to market, that caused the financial crisis.
- o BT: We may not be on the same causal boat.
- o DHE: I have a factor Peter doesn't have: the transparency issue that contributes to the panic. PW: I agree with that too.
- o BG: They appear to be AAA but they are problematic.
- o DHE: Regardless of why, it is harder for counterparties to assess the riskiness of each others' balance sheets.
- o DHE: In a panic people are no longer doing the math. The key to this episode is the locking up of interbank markets and other key markets – I won't lend against Treasuries – that's panic.
- o BG: They were afraid to lend against GSE debt. PW: I thought they said they never had trouble repoing their agencies. RB: There were haircuts on the agencies.

Securitization role

- *Did the securitization process make the bubble larger?*
 - o HM/PA: Yes.
 - o PW: I don't think it was push, it was pull (FNM/FRE), i.e., some staff thought they were predatory. I'm sure people will say they were treated badly; it didn't cause the crisis.
 - o PA: Push = marketing a product to your customers.
 - o PW: Yes, but the only reason you created the mortgage in the first place was you knew you could sell it to FNM/FRE/CRA.
 - o BG: But the private label market was demanding mortgages... which is pull, demand for product.
 - o PW: There was competition for these mortgages.

- o BG: They bought originators so they would have a captive market.
- o PW: FNM went out of business because they were paying more for these high-risk mortgages than they were worth, because of competition.
- o BG: The same was the case for the private financial firms.
- o DHE: No. The housing bubble was the price of housing. I don't believe securitization changed significantly; we get the housing bubble anyway. PA: The availability of reasonably priced credit helped drive up prices.
- o PW: It's just a method of financing.
- o DHE: Securitization was not significantly important in the housing bubble. If you're packaging bad mortgages, it's because the rating agencies didn't do their jobs.
- o HM: In the absence of the packaging of these securities, the crisis couldn't occur.
- o DHE: I'm on record saying the rating agencies and securitization is an important part of the *financial* crisis. Is it part of the housing bubble? No. KH: Agree.
- o PA: What work has been done on the expansion of this type of credit? What kind of pressure did that put on housing prices? The thesis is, but for the securitization chain, you couldn't have offered this product.
- o WE: You can tie securitization to interest rates; or to access to mortgages. At the time we thought securitization was a good thing, we liked that it was increasing liquidity in the mortgage markets. There's lots of evidence securitization leads to lower interest rates – and lowers the cost of getting a mortgage – and there's lots of evidenced lower interest rates leads to higher prices.
➔ Research will follow up.
- o DHE: How important is that relative to global savings glut and interest policy?
- o BG: The process creates products that more investors can buy, including international investors.
- o RB: In markets that frothed more, there is a higher percentage of subprime that went through the PLS machine.
➔ Research will follow up.
- o PW: Without securitization, things could have been much worse, because it took these mortgages out of the banking system to other investors. Only a portion of it was in the banking system.
- o BG: If there hadn't been securitization, the bubble wouldn't have been as big.
- o PA: What went into the pipeline was flawed. The fact that nobody had skin in the game.
- o *Undecided on whether securitization contributed to the housing bubble.*

- BGr: Could we have a chapter or two written in the narrative form we're looking for but incorporating these concepts?
 → Research will provide.
- WE: *Private label mortgage securitization increased access to mortgage markets and lowered costs, contributing to the bubble.*
 - DHE: I have problem with using the term securitization. If it was PLS MBS, I would have less difficulty with this.
 - PA: We had a problem with what got securitized. It turned out the structure was powerful.
 - KH: I think it was the inputs to the securitization.
 → Research will provide more numbers.
 - GF: The GSEs led the market in 2000-2003, the PLS led the market in 2004-2006.
- WE: A bubble can be caused by anything that creates liquidity in a specific market.
- RB: House prices are going up; when prices peak, the question of where the credit losses are, and it turns out they are sitting on the books of large institutions through opaque mechanisms – I think there is more agreement on that.

To do

- Research will provide data on components of refi/home purchase (subprime, prime, etc.) and default experience.
- Research will provide data on originations by prime/subprime/etc. through 2008.
- Research will provide breakdown on what people did with their refi loans.

Role of securitization in the bubble

- DHE: Agreed with Bernanke's comments. We all bought into the bubble. Community banks, investors, bought into it. With no securitization at all you would have the bubble. How the money got there doesn't matter. We had a bubble before the PLS/subprime market. We could have still had the financial crisis.
 - BB: Securitization per se wasn't the problem. It was a very easy pass-through for the money.
 - DHE: Banks could have originated the same loans that were going through the PLS market.
 - RB: Consider the argument that the PLS securitization process had been corrupted because of the multiple players driven by fees and volumes.
 - DHE: I agree with the argument that the transmission of the bubble to a crisis was partly driven by the problems with incentives. What I argue with is whether securitization played an essential role in creating the bubble.

- o WE: After 2004, once you know the end buyer is an idiot, securitization starts to result in looser terms.
- o KH: There's also an argument that we had builders building lots of building and financiers wanting to finance them.
- o DHE: Two phenomena: bubble states and industrial Midwest, which had considerable subprime issuance and default problems. It's not the finance driving it.
- o BT: Bakersfield experienced this: national builders coming in with more financing options.
- o BG: I have trouble with juxtaposing community banks with securitization origination. With securitization, you're bringing a lot more capital into the market to the same homes. Discipline for a community bank holding a loan in the neighborhood is different from the securitization market with money coming in from around the world.
- o BB: The important thing in this case was securitization. The hypothetical is irrelevant.
- o PA: Capital availability has an impact on pricing in my experience. The form of securitization did make this particular product more available – i.e., nontraditional mortgages.
- o PA: In this particular form of securitization, a great deal of lending was made by lenders that were dependent on this system; the ability to move the product along affected the due diligence that was done.
- o PA: In terms of regional bubbles, I do think there were certain markets – like Bakersfield, Central Valley – where population, migration, reasonable pricing, employment all increased the demand for the product on top of the acceleration in financing.
- o DHE: I agree this was important on the down side but not on the up side.
- o KH: I agree the regional aspect is important; this wasn't a national bubble. There also could have been shady lenders operating more in certain areas than others. There needs to be a regional explanation for regional bubbles.
- o HM: You don't need every region to be up to have a housing bubble. Regions are different from a population and economic standpoint. The bubble can still be a national phenomenon in that it was driven by common national factors, even if was focused on certain regions.
- o KH: There was probably something unique about these four or five regions.
- o HM: Yes, that's true for Las Vegas; but the regional aspects were less important than the fact that the easy money was available nationally through the securitization market.

- o BB: There has always been a certain element of sleazy promoters that go in and out of various kinds of money-making schemes involving derivatives. They have targeted various markets, which have been in my time, South Florida, California, Las Vegas. I'm not sure why. People were vulnerable. The same people would do this in different areas.
- o JT: Nationally it was a bubble, on average.
- o KH: If you went to Massachusetts, you'd hear about banks and Wall Street, not housing and mortgages. In other parts of the country this was a Wall Street crisis not a housing crisis.
- o BG: Isn't it partly that these places were growing?
- o PA: The problem is that it allowed for the distribution of deficient product: it was a conveyor belt for the problem.
- o KH: Was it a national or a series of regional bubbles? Did housing finance drive the housing bubble? To what extent did private label securitization contribute to the bubble?
- o DHE: Securitization is not a big deal for the availability of capital to the housing finance market. It reduced end-user borrower costs; more people used it.
- o BB: Without securitization, you wouldn't have synthetic CDOs; CDO-squareds and -trebled; and other mechanisms like CDS on securitized products.
- o DHE: It in effect raised leverage; you can change leverage in a lot of ways. You could have decided as a nation that you wanted more leverage in other ways. That's not an important aspect.
- o DHE: Second, it increased opaqueness. It *did* contribute greatly to the financial crisis.
- o JT: There are a number of changes that occurred in this period: changes in the process of securitization; increases in the amount of money from Wall Street; if you don't look at those things aren't you copping out.
- o DHE: It's only causal if there wouldn't have been a housing bubble without them.
- o DHE: Yes, it contributed modestly to a diminution of lending standards.
- o BG: Securitization created instruments that became illiquid and resulted in losses during the crisis.
- o Propose language:
 - *Securitization provided more liquidity to the mortgage market.*
 - *It may have increased liquidity in some securitization markets more than others; as it may have required less due diligence than historically had been required.*

- *To the degree securitization improved liquidity and thus loosened loan terms, it inflated the bubble.*
- Did it contribute to the bubble? Doug doubts.
- Did it contribute to the diminution of lending standards? Agreed.
- Did it contribute to the financial crisis? Agreed. How: it allowed for the concentration of risk rather than diversification, and it obscured risk.
- BGr: Securitization has made the resolution of the crisis more difficult because it is difficult to work with borrowers to modify their loans.
- WE:
 - *The PLS securitization market in 2003-2006 was fundamentally different from previous mortgage securitization, or from securitization in other asset classes. In particular, subprime/Alt-A securitization had less due diligence.*

Supervision and Regulation

- BT: Use supervisors' own comments on lessons learned where you can. They volunteered examples where they didn't do very well.
 - BB: Note Scott Alvarez's comments in our interview about the regulatory mistakes and the deregulatory atmosphere in the pre-crisis period.
- BB: Some of this was *policy decisions*. For example, (1) Fed not issuing standards on predatory lending; (2) Fed not looking at nonbank subsidiaries; (3) CFMA takes any federal agency out of looking at derivatives, state laws are preempted, and private rights of actions by counterparties are limited.
- DHE: Need to say in each case, "and this is why this created a crisis."
- HM: Failure can be from different causes. For example: there was no policy; or there was a policy that wasn't implemented.
- KH: Yes, there were regulatory failures. Were these observable before the crisis? We need to be specific.
- JT: I see two buckets: (1) did we have regulations that we chose not to implement or that we had a laissez faire attitude about; (2) were there gaps in the regulatory regime. The regulatory regime may have not kept up with market changes, for example in the case of capital.
- PA: The regulatory capital standards were set by the regulators.
- BB: Four categories: legislation, regulation, supervision; and gaps in the framework.
- PA: There is *policy*, which is legislation plus.
- PA: Gaps: Conscious decisions to *roll back* standards (e.g., CFMA by Congress, Section 20 subsidiaries' activities liberalized by the Fed).

- PA: We'll look at specific cases and look at whether the *policy decision* was causal. There was a shift in philosophy in both parties about what was the right level of oversight.
- WE: There can be legislation that everybody agrees was not optimal; there can be others that, if they were different, we wouldn't have had a crisis. There is also the question, was the regulatory process subverted somehow to create suboptimal outcomes. Can we point to things that regulators did?
- BT: Careful not to criticize motives.
- WE: They could be doing the best they could and guessing wrong...
- BGr: We elected people for 30 years from both parties who believed that markets worked, that government was the problem not the solution.
- PW: FDICIA was a tough regulatory law in 1991 after the crisis of the late 1980s. It wasn't exactly as though people always took the position that markets could regulate themselves. There was a feeling that regulators could protect banks against failure.
- JT: It's important to focus on gaps in the regulatory regime because regulations were inevitably going to have gaps. We put something in place that we thought was going to help but we took a knife to a war.
- BT: Every one of the bureaucrats said, we couldn't do it. We didn't have the power. On the other hand, in the case of HOEPA, the power was there and it wasn't exercised.
- PW: The Fed could have used the power it had to regulate subprime lending; the reason they did not was that until the crisis began, everybody was happy with what was going on in the housing market. If the Fed had said, we're going to stop this, Congress would say, people have access who never had access before, how can you stop it?
- PA: Homeownership peaked at ~2004. HOEPA rules went to predatory lending; AGs across the country were trying to crack down on predatory lending in 2000-2003. There were internal debates at the Fed; the Fed did adopt HOEPA rules in 2001, and it ends up constraining 1%, so they missed their objective. Politically this would have been difficult but part of the job is to do what needs to be done anyway.
- PA: Bernanke today said supervision is the biggest failure at the Fed.
- PW: Bernanke said monetary policy did *not* cause the bubble. At the time, nobody knew; this is hard in hindsight.
- BB: Gramlich, Bair were saying at the time that predatory lending was a problem. Greenspan and others have testified why this wasn't done and they don't say the reason was housing policy – he says in his testimony that he believed it was too difficult to frame rules that would deal with this sort of thing and the Fed wasn't an enforcement agency anyway. Plus, the OTS and OCC were affirmatively preempting state laws with respect to thrifts and national banks. They weren't acting purely because they believed in deregulation; they just wanted to have sole power and that was their motive.

- BT: Did the (poorly) regulated portion of the industry create safer loans than the less-regulated portion?
 ➔ WE: Yes; Research will follow up.
- PA: First ask, did this contribute to the crisis?
- BGr: Were there benefits of not having regulations?
- PA/BB: Not implementing HOEPA rules was a regulatory failure; they had the statutory mandate to do so.
- PA: Let's talk specifically about each supervisory failure.
- Propose: *The lack of adequate regulation of mortgage origination contributed to the poor quality of mortgages.* Agreed?
 - Fed had the statute to adopt HOEPA rules
 - National banks and thrifts (OCC/OTS)
 - State banks (FDIC/Fed/states)
 - Non-bank mortgage brokers (light state regulation)
- RB: History: HOEPA in 1994... under that authority the Fed implemented a rule in 2001, which applied across the board. They didn't pass another rule until 2008. It was effectively enforced by all of the relevant agencies. In 2005, they realized it wasn't applying to as many mortgages as they thought it would. They had a series of hearings in 2005 and 2006. Sandra Braunstein told us they realized there was a problem; rules would take too long so they issued guidance. The guidance doesn't apply to everybody, it only applies to regulated institutions. Subprime lending is growing throughout.
- RB: Gramlich, Bair were arguing back in ~2001 for supervision of nonbanks.
- DHE: The guidance was coordinated with the other agencies – it wasn't a HOEPA rule. It only applies to banks and thrifts, not to mortgage brokers.
- BT: Had that guidance applied to all mortgage folks would it have made a difference...
- GF: This came out in late 2006, too late to make a difference.
- WE: Fed felt that to move the battleship, the evidence had to be irrefutable, and we weren't nimble enough.
- BGr/BB: State laws varied.
- DHE: Tougher states did result in fewer loans going bad.
- WE: Agreed? *Had we had different mortgage regulation, we would have had less of a crisis.*
- PW: Don't agree.
- PA: Two themes with respect to the Fed: Weak HOEPA regulation; not supervising nonbank subs.
- Again: *The lack of adequate regulation of mortgage origination contributed to the poor quality of mortgages.* Agreed.

- KH: Agree with that statement; don't agree that, therefore, it was a mistake, given what they knew at the time, for the Fed to have not chosen a different path.
- BT: They thought it was adequate. They have a corrective that shows that it didn't work; shouldn't they have then done what they thought they had done originally.
- HM: Failure of execution.
- KH: *Based on what we know now*, those actions were insufficient.
- PA: In 2005, you should have been in there more quickly. Also, the regulator has a responsibility to be on top of the market. The failure was, not just what we know now, the Fed should have been out there in 2005 and 2006 understanding its implications.
- KH: Agree. It's important to distinguish where a regulator failed to diagnose what was going on, versus, they knew what was going on but chose not to address it.
- DHE: The Fed issued interim guidance and launched into a new rule... they didn't do nothing.
- BB: Alvarez discusses the failures of the Fed to take effective action in terms of lending. He said, we all thought the market would take care of itself, that we didn't need to look at the nonbank subsidiaries because there was a pervasive belief that regulation wasn't important, effective, or necessary.
- HM: There are timetables in every profession; if you fail to get something done in the right timeframe you get fired. It's a failure.
- PA: By 2005 it's a very different issue from 2001 – 2001 was about unfair and deceptive, subprime was much worse.
- BT: I don't do windows – these responsibilities didn't fit into their mission.
- BB: The emphasis was on safety and soundness not consumer protection.
- RB: HOEPA applies to everybody who is an originator. They thought at the time that lowering the threshold would have affected ~30% of origination, but it turned out to be only 1%.
They were deemed predatory if more than 8% above prevailing rates.
- PA: By 2005 the Fed should have done something more.
- PW: If they had, it would have had an impact on the housing crisis.
- KH: Acknowledging Bernanke now says it was a mistake... what were they saying then?
➔This should be researched.
- BG: We shouldn't be shy about criticizing the Fed. Both Greenspan and Bernanke have acknowledged the mistake. They had the power and they didn't exercise it.
- BT: They did but not sufficiently.
- PW: The Fed had a very broad statute; they interpreted it as trying to prevent predatory lending; they investigated; they tried. I agree with that. They did not stop all subprime lending. What I have a problem with is saying they should be criticized for not going

further than they went because at the time people were very happy about what was going on.

- BT: They assumed a certain result; it was negligent.
- PW: It would have had an impact; we don't know how much.
- KH: They failed to achieve their goal; I'm comfortable with saying, the lack of doing more was causal; I'm not comfortable saying, it was an additional mistake, given what they knew at the time.
- PA: They should have been monitoring the market and figured it out.
- BB: The HOEPA failures were only part of it; they also failed to have adequate guidance to the thrifts and banks and to nonbank affiliates. Alvarez, Greenspan, Bernanke.
- HM: They didn't distinguish the failures as just HOEPA; they meant it more broadly.
- PA: Three issues: (1) HOEPA; (2) nonbank subsidiary supervision; (3) they only made two referrals to DOJ between 2000 and 2006.
- PW: This shows they didn't do a good job; there is a further question, whether they could have done more.
- WE: What they did in 2008 was much more aggressive than what they had done – because there was a new Chairman. They're saying, we wish we had had the guts to interpret the statute as aggressively as Bernanke did in 2008.
- DHE: An independent agency always worries about over-stepping the authority because you can lose your independence.
- BB: From a lawyer's point of view, the statutory language of HOEPA was familiar for an independent agency statute.
- KH: I agree, the Fed failed to do what it said it wanted to do; I agree that ex post, the Fed should have done more; and the lack of doing more was at minimum a contributing factor to the creation of bad mortgages. I'm unwilling, without knowing the debate at the time, to say they made a mistake in not going further. It's unlikely that I will go to a place of drawing broad conclusions about a general attitude from one case.
- PA: If they didn't even do basic due diligence... that's different from knowing and not acting fast enough.
- KH: That's a lot harder. I'm not sure I can criticize. How much of the more aggressive Bernanke posture was the change in leadership, and how much was that the reality of the situation and the problems were a lot more apparent. Probably both. Greenspan's less regulatory posture was well known, well stated. I'm willing to grant that was a contributing factor to the regulatory posture that contributed to the crisis. That doesn't mean that it was on the whole the wrong posture.

