

MEMORANDUM FOR THE RECORD

Event: Anthony Sanders, George Mason University

Type of Event: Group interview

Date of Event: May 17, 2010, 10:30 am

Team Leader: Greg Feldberg

Location: 1717 Pennsylvania Ave, Suite 800

Participants - Non-Commission:

- Anthony Sanders

Participants - Commission:

- Randall Dodd
- Greg Feldberg
- Tom Greene
- Jane Poulin
- Kim Shafer

MFR Prepared by: Greg Feldberg

Date of MFR: May 18, 2010

Summary of the Interview or Submission:

- Background. PhD, taught at Iowa, Chicago GSB until 1997; at DB through 2000; ML working on pricing models. Ohio State, Arizona State; George Mason for 10 months. Studied topics of securitization, MBS, banking, underwriting.
- [Derivatives?]. No, this wasn't derivatives. That's a good straw man. → **Look at my House testimony**. In short, the government has been promoting home ownership for decades... FNM, FRE, and the FHLBs pumped \$8 trillion into the financial system since 1997. I have a graph showing that the house bubble looks exactly like the guarantees that FNM, FRE, and FHLBs were all issuing. Government has to take some responsibility for failing to regulate and failing to monitor.... It crashes and then we blame it on derivatives. We had already hit the peak of home ownership. All we did is double housing prices.
 - Did derivatives contribute to it? Yes, it's a contributing factor, absolutely. That's always been my concern... I'm a big multi-family housing fan.
 - Around 2002 or 2003, the Fed should have stepped in, we're going to overheat this... we had a big party going on at the Fed and Treasury.
- [How were derivatives a contributor?] Credit default swaps... how did they cause the problem? It was not CDS that caused Greece's problems. Greece's problems were caused by excessive

debt.... Once the debt became known, CDS snapped up. Bond prices lag. CDS are the fastest indicators of any noise in the market. It's a traded market. It's two parties willing to buy and sell insurance. It's a small percentage of the derivatives markets but it's highly reactive. CDS are really reactive. [CDS is more actively traded than other OTC derivatives?] Yes.

- I think they provide a public service in that they provide information, and they allow you to take positions... Are naked positions bad? I think they're a good thing. Why? I have a portfolio...
- [CDOs and CDS role in building the MBS bubble?] At the peak of the market we wrote a paper, in 2005, looking at how rating agencies were rating CDOs, our conclusion was there is no way the rating agencies have any clue to rate these. They were substituting sophisticated models of correlation for seriously looking at collateral. → **Professor Sanders will provide this paper.** BMA said we don't want to fund this. On the way up, everything goes; on the way down, nothing goes. I've dealt with rating agencies. Reverse-engineering the models—they're usually doing something more simple than you're doing. They were missing the whole point that the collateral budgets were... The rating agencies are very historically based.
 - Did people realize there was a problem in the housing market? I don't think FNM or FRE saw it. FN said there's no housing bubble.
 - If you look at subprime defaults flattening out, if you're totally based on historical housing prices, you're not going to get much out of historical models.
 - The systemic risk was just staggering. End of story.
 - The market demand for CDOs went off a cliff.
- [Did CDOs continue the bubble?] No, for the following reason. I actually don't believe it. If you look at the databases that people had. Lehman, Deutsche. They all have access to Loan Performance; Derivatives Solutions, which gives up-to-date information on derivatives behavior. McDASH. We had a good idea of what the risks were in subprime markets. As the market saw the subprime softening, there was fear... then when it went off a cliff...
- Two events: second half of 2006, then second half of 2007. 2006 was a warning sign. House prices started to slow down. If you broke up the indices into regional, the national indices were just past the peak, but in defense of everybody, it can flatline and go back up, it doesn't have to go off a cliff. When they started to see serious declines in Arizona, Florida, Nevada... look at origination data in subprimes and Alt-A, which were often in the southwest and Florida. When the house market started falling. → **Paper in Journal of Economics.**
- Synthetics are just a derivative on the underlying securities. This gets ballyhooed because the CDO market collapsed. I just don't see where the synthetics were better or worse, other than transparency. One thing I do blame the crisis on is the lack of transparency. There are two levels of transparency. Subprime, Alt-A, almost all of that data is real-time. You can see just how bad that is performing every month. I have not sympathy with the people who bought that stuff. The other problem... the CDO market is fine on the surface. The problem CDOs had is the infamous problem with CDO-squared. CDOs of CDOs. As you know, in a CDO transaction. Two sets of bodies in the rating agencies. Assume they contribute zero at best. At worst, their naivete caused some damage. But I don't think sophisticated investors do... If you look at a

CDO transaction... I tried to get collateral buckets for some CDOs. You can't get the 144A. When they hold the Goldman hearings, hallelujah, you finally got to see the marketing presentations.

- Manufactured housing. Conseco. What did we learn? Apparently nothing. It was the same crisis on a smaller scale. We lent to lower-income borrowers.
- It's the extent the market couldn't identify the risk of the underlying collateral, whether it's cash CDOs or synthetic CDOs.
- When I was watching the Goldman hearings... the big question in my mind... one question rises up... if I can look at those pitch books, and I saw problems, I would have looked and said, hmm, why did people buy those when there was clearly a lack of information.
- [Each CDO could buy 5% of its collateral in another CDO, for example.]
- [Underwriters couldn't sell the AAA piece, so they held it.] When CDOs started out you could have multiple layer assets... the middle stuff was fine... everyone always wants triple-A, the middle stuff is always dicey to get rid of. The demand for the middle stuff went to zero. The market has bifurcated into super-super senior vs. equity. A lot of these tranches they were mixing and matching was just separating the market into these two types of claims.
 - Abacus: There are CDO deals that showed up in each of the deals... that was not transparent.
 - Synthetics were in each deal that Goldman was doing... is that necessarily a problem? No. It just means if you bought Goldman CDOs for diversification, going back to Moody's, this isn't going to be diversified at all. The more interesting question is why was the market buying nontransparent securities.
 - When the spread game collapsed... when it started to unravel... there was no place to hide. Once it turned out the collateral turned out to be much more risky than thought, the market for nontransparent, thinly traded securities went ().
 - When markets are heating up in a bubble, everything looks good, there's plenty of liquidity. The first things to get knocked out are nontransparent securities.
 - Transparency would have solved a multitude of these problems. We would not be here to do if it wasn't for the lack of transparency.
 - Supposing that I want to look, as an independent bystander, I have models of subprime losses... and then I want to look at a CDO. I don't have access to CDO details because they are transactions between two parties. I don't know what those two are transacting at.
 - You can't go through and measure the risk of the CDOs. Add CDO-squareds on top of that. Nontransparent securities of nontransparent securities.
 - You couldn't predict how a CDO was going to perform, but we knew at the global level.
- **➔ Article, Securitization after the Fall, NY Times, Nomura data.**
- [Rating agencies?] We did a study for a court case. The number of downgrades relative to what the market was doing was... very little. They had like three downgrades. I was on the infamous phone call where the hedge funds were yelling at the rating agencies. You're just now downgrading these securities. ➔ Professor Sanders will provide this paper if he can.

- You send a deal to three and pick two.
- Compensation... they're not paid anywhere near what the people creating the securities... The people at Goldman are always two steps ahead of the rating agencies, and three steps ahead of the regulators.
- A pure derivatives market should not affect the supply and demand of the underlying market. In CDOs there was twist. If CDOs were the buyer, it could impact the pricing of the underlying securities... You're creating an alternative market for the distribution of those assets. The CDOs are picking up the slack. This is a violation of what we thought we knew about the derivatives market. (Both cash and synthetic?) Yes. It wasn't the synthetics per se. It was that the demand for the base product was declining. If they start buying to place the CDOs... But it's momentary. This doesn't last very long. The market seems very long... [A year?] Yes, about a year, that's not a long time. The same thing happens with mutual funds...
 - If you look at straight derivatives contracts... the CDOs actually do have an impact on pricing of the base asset.
- [Other derivatives arguments?] I went through two crises... the Asian flu and the Russian crisis. We had an internal investment fund in which we had very small haircuts. We had very little equity in transactions. We reposed the securities. We had extremely high leverage. Haircuts expand dramatically. But we had a huge balance sheet and it wasn't a problem. Deutsche Bank.
 - This time... too much leverage, is it bad or good? On the way up it's good, on the way down it's always bad. Our banks were massively under-capitalized. That's been a historical problem. One argument could be made that leverage has a positive effect because it keeps the market going fast and furious... you can exploit inefficiencies and keep the market honest. Careful to argue that getting rid of leverage is a good thing. You don't want to prevent risk-taking.
- [Oversight?] Had there been proper oversight on Fannie and Freddie to begin with... I agree, it's impossible to regulate them... we wouldn't be sitting here today. Had the banks had serious supervision... during the Greenspan/Bernanke merger era, we were allowing banks to merge, we created TBTF. All along the Fed has rules on their books that this shouldn't be happening, deposits aren't supposed to be so concentrated, none of these banks should exist. The rules are already on the books.
 - I'm not a big regulatory fan, but if we do have rules in place, the best thing to do is enforce the ones we have.
- [Regulatory capital arbitrage?] FRE and FNM securities programs are given very advantageous treatment in the risk-weighting. Banks can hold those securities more so than other securities. They are given favorable treatment presumably because they are riskless. That has skewed the market. What we're pointing out in that paper is the 30 bps advantageous. The GSEs contribute a whopping 30 bps savings to the American taxpayer. To get households this savings, we've just created this staggering problem. On a cost-benefit analysis, we've gotten the short end of the stick. We have so skewed the US toward home ownership and to the GSEs...
 - How do we get the banks back in the market? 99% of the market is now FHA and the GSEs. Part of the problem if you're trying to undo the house of cards... do we still need

subsidies for owner-occupied housing. The proverbial corner solution. If you take away the benefit today... the tax credits have expired, I'm already predicting another pricing decline this year.

- FNM and FRE are almost an endangered species. Banks are encouraged to hold them, and not to originate and hold on balance sheet... FNM and FRE had historically had good underwriting standards... but why do you need them to make loans to good credits... There were warnings—don't go for high LTVs. They did it. FNM previous blow-up in 1979-1981. Dwight Jaffie. FHA said you need some low-downpayment loans, and that's okay, if you regulate it. But zero downpayment is just suicide.
- Sources: Van Order and LaCour are working on the LTV issue.
 - FHA has a more actuarially sound insurance model; FNM and FRE are underpricing their guarantees.
- [Risk retention as a solution?] I've argued that is another strawman. I uttered 5% to the Fed several years ago. In theory risk retention is a good thing. We already had that. The originator typically retained about 5%, the equity piece. CFC kept all of the residuals on their books, which was about 5%. It's the skin-in-the-game. When housing markets did this... how long did 5% last? Those residuals were wiped out within a few months. Bingo. WaMu. All of them did the same thing. That's a myth that we didn't have that, it just didn't work. They would try to hedge the residual pieces, that's a lot harder to do than it sounds. Even if you have real risk retention of 5%, you'll be able to hedge that. Sarcastically, why don't we require them to hold 50%, then you'll kill of the securitization market.
 - It was very mollifying to the market that somebody bore the first loss piece. Another issue is the fallacy of warranties. That was a noble idea which works if the market works, but the courts are now jammed up... there is so much moral hazard. If you lost money on a CFC deal.
 - It's about the underwriting (George Stigler) the low downpayments was the blast. Once you opened Pandora's Box on the downpayments, it formed a huge bubble.
- **➔ Paper comparing Phoenix vs. Denver. We found out that flipping in Phoenix was a tremendous problem. Denver didn't have an underlying market that was growing. Some of it is land-use restrictions, population restrictions. Boulder is fixed as to how many people can move there.**
- Biggest problem of this is that we are going to deny people access to credit.
- I found deals with high downpayments that were subprime, they're performing. It's all in the downpayment.
- Capital cures a whole host of problems. It's just proper risk management.
- Simple downpayments would go a long way to fixing the problems we faced.
- Derivatives were really not that big of a problem. I think the government created the mess in the first place.
- **Contacts: Bob Van Order. Andy Davidson. Calomiris. Arnold Kling at George Mason.**

4839-0342-4006, v. 1