

MEMORANDUM FOR THE RECORD – MFR

EVENT: Interview with **Mark Zandi**, PhD, chief economist, Moody's Analytics , West Chester, PA

TYPE OF EVENT: Group Interview

DATE OF EVENT: August 16, 2010

TEAM LEADER: Researchers Tom Stanton; Ron Borzekowski

LOCATION: FCIC small conference room, 1717 Pennsylvania Ave. NW, Suite 800, D.C.

PARTICIPANTS/ NON-FCIC: Mark Zandi

PARTICIPANTS/FCIC: Tom Stanton; Ron Borzekowski; Gary Cohen; Richard DeKaser (who left the interview about 10 minutes into the discussion); Alexis Simendinger.

MFR PREPARED FROM AUDIO BY: Alexis Simendinger

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SUMMARY OF INTERVIEW:

Tom Stanton opened the discussion by thanking Mr. Zandi for being helpful to the FCIC in the past and asking him to review his education and background for the record. Mr. Zandi explained that he has been with Moody's Analytics since November 2005, when he sold his own firm, which he owned for 15 years, to Moody's. Mr. Zandi is a macroeconomist and earned his doctorate in 1988. He explained he does a lot of mortgage market analysis to respond to clients. He said his clients relevant to the financial crisis were or are: Fannie, Freddie, all the major mortgage insurers, mortgage companies, banks, Treasury, OCC, and his biggest clients are regulators; large industrial concerns including General Electric and Siemens, Boeing. He said his client base is diverse. He said he expresses his views, separate from his clients' enthusiasm. "I think the mortgage interest deduction should be reduced, and I say it. I argued for cram-down in bankruptcy. I think that is something we should have done." Zandi added that he does not take payment for his policy advice.

NOTE: This is not a verbatim transcript, unless remarks appear inside quote marks. Please refer to the audio.

Q. Mr. Stanton: What are the big issues the FCIC should study as causes of the crisis?

Zandi responded that there are many. He outlined four significant forces, and added a fifth: 1) a period of a surfeit of global savings and liquidity in the system; 2) flawed securitization processes with loans; 3) regulatory failures; 4) "flat out hubris," meaning expectation that housing prices would always rise; and

5) government “policy mistakes,” chiefly the handling of Lehman, which contributed to “outright panic and near collapse” of the financial system.

- 1) *Surfeit of global savings*: Beginning a decade ago, when emerging economies, primarily China, entered the global scene – with its high savings rate – “a lot of funds were generated [and] those funds were the fodder for all the money that came pouring back into our economy, and without that liquidity, we wouldn’t have the raw material necessary for the lending that ultimately occurred.” Also tangentially important was the liquidity – global central banks maintained “easy money” policies.
- 2) *Securitization process was flawed*: Taking global savings and turning it into loans of all kinds. The securitization process “inappropriately funneled that cash into the lending process.” The problems were all along the chain of securitization, from origination to issuance to ratings, to global regulators and due diligence.... “No one really had a clear vision or sense of the entire pipe and how it was working and how poorly it was performing,” Zandi said.
- 3) *Regulatory Failure*: Regulators were responsible for the securitization process and “they failed in that function,” partially in response to a belief that “the market would take care of itself.” “The regulatory function, I wouldn’t say it was neutered, but it withered.... Regulators failed,” he said.
- 4) *Hubris*: “Flat out animal spirits.” If house prices rise 10 percent in one year and 10 percent the next, then you believe that prices will never fall, he said. And if you believe that, you do all kinds of things, and “we did all kinds of things.” There were multiple dimensions to the hubris, Zandi said. The naysayers in the market could say it did not make sense to them, and after offering that point of view perhaps once or twice find themselves “losing complete credibility,” which further cements the hubris.
- 5) *Policy Mistakes*: Zandi said the U.S. would have suffered a “garden variety” financial crisis instead of a severe recession if it had not been for “a series of policy mistakes.” The one that everyone points to is the Lehman failure, and I think that was a mistake, he said. That ultimately turned what was a “garden variety financial crisis,” the kind the U.S. suffers “every decade or so,” into “outright panic and a near collapse.” “We probably would not be sitting here today if not for that policy failure.” Also, the federal takeover of Fannie and Freddie *a week earlier* than Lehman might have been the catalyst for the panic. It crystallized to global investors that none of their investments were safe. “That was botched, I think, the way that was done.” If their equity investment in Fannie and Freddie was zero, then nothing they owned was safe. And therefore Lehman was immediately in play, and one week later went down. The takeover of Fannie and Freddie may have been the actual catalyst for the panic, one week earlier than Lehman.

Zandi noted that there were several aggravators that were not necessarily causes of the financial crisis, but deserve mention. First, Zandi said he did not believe that **Fannie Mae and Freddie Mac** caused the crisis, but they did amplify it. Their share of the mortgage market fell steadily throughout the boom and the bubble, according to numbers from the Fed's flow of funds. In 2001, their share peaked at 53 percent; by 2006, which was the peak of the bubble, their share was down to 40 percent. They sought to step in at that point to regain some of their market share. Their 2007 book was the worst book in terms of vintage of loans, far and away the worst. Between mid-2006 and Q1'08 were the worst vintages. The losses on those books were high, but were not high compared to anyone else, but they did not capitalize to any losses, he said. "They amplified the mess."

Q. Mr. Stanton asked if it is possible to distinguish -- in terms of damage caused -- between what would have otherwise happened when the housing bubble deflated eventually, and the events that unfolded after the panic.

Mr. Zandi said yes. The unwinding of the bubble was already having negative consequences on the broader economic activity and without the panic might have been "an average recession," which he described as eight or nine months in duration; unemployment would peak out at 7.5 percent and GDP loss would be, peak to trough, 2 percentage points; and housing price declines would be roughly half of what they were -- 15 percent, maybe 20 percent. House prices would have gotten to their equilibrium level in a more orderly way, he said, and not just straight down in a short time. Fifteen percent house-price decline is a crash, but it was devastating with the panic, he added. With the panic, we suffered 30 percent house-price decline peak to trough; GDP down 4.1 percent peak to trough; and unemployment peaking, well it's probably not even finished peaking, but the near-term peak was 10 percent, he said. It was the worst recession since the Great Depression.

"In my view, we would have suffered a depression, if not for the subsequent, very aggressive policy response by the Federal Reserve and fiscal policymakers," Zandi added.

Q. Stanton: If the panic could have been averted, we would not have had the depth of unemployment, of house-price declines, etc.?

Zandi: Yes, because it became self-reinforcing. It began to feed on itself.

Q. Borzekowski: Self-reinforcing factors: Can you reflect on the September-October 2008 period and discuss the feedbacks between the financial sector and the real sector?

Zandi: There is a self-reinforcing factor in the real economy. That is, house prices decline; people are put in negative equity positions; they default; house prices decline. Similarly with credit restrictions; the economy goes south; creates more losses for banking system; they have to pull back -- another self-reinforcing loop. Others relate to general psychology, when things go bad and it becomes self-fulfilling.

Q. Borzekowski: Can you talk about the late 2008-2009 credit crunch and economic pullback?

Zandi: The serious collapse in economic activity in the fourth quarter of 2008 through the first quarter of 2009 was a pullback in consumption in real economic activity. Consumers saw the obvious turmoil

and seriously pulled back in their spending - “just battened down the hatches.” In business investment, I’m sure there were some credit effects.

“The whole world stopped: The real world economy seemed to literally stop in October,” and then I think we’re now still feeling the credit crunch – we’re still feeling the effects of that. That’s still playing a role in consumer spending and employer investment, and hiring decisions.

Q. Stanton: There was a panic of 2007. Was that avoidable?

Zandi: I wouldn’t call that a panic. That was a garden variety financial crisis, like the circa 1998 Asia crisis. That could have turned into a panic, but policymakers acted aggressively and successfully. Zandi added that Fannie Mae and Freddie Mac jumped in at that time to provide liquidity by buying securities and that’s when their balance sheets began to expand, but he credits them for helping to end the crisis of 2007.

Q. Stanton: Back to your list of the causes of the financial crisis, and your discussion of securitization -- why did the crisis go into securitization and housing this time?

Zandi: Let’s go back to China and emerging economies. They came into money for the first time in the early 2000s. The Chinese first bought Treasury securities as a cash cushion, a CD of sorts. One step removed from a Treasury with more yield is Fannie/Freddie, then Fannie/Freddie MBS, then this other stuff. They went into Ginnies and Fannie/Freddie securities, but drove down the yield further. The rest of the market is then searching for yield. There is pressure by clients to see double-digit returns, at least. The emerging investors brought down the whole yield structure and then brought in the credit spreads, and other risk-taking investors decided they needed more yield and looked to private label sources.

Q. Stanton: But why was the crisis in *securitization* rather than debt?

Zandi: Oh, well, it was simple. It was a liquid market. It had ratings. It was very straight forward to do. You didn’t have to do a lot of your own due-diligence or work, and this is part of why it broke down. Everyone believed in it. And there were good stories that housing prices never declined, or they might decline in California, but they don’t decline everywhere across the country.

Q. Stanton: **Regulatory failure** – what is your sense of the sources of regulatory failure?

Zandi: I don’t believe the Fed was co-opted by Big Banks. I don’t believe that. I think they felt that the market was functioning well and these were self-interested parties and they presumably knew what they were doing, and they didn’t need that kind of regulation; they didn’t need that kind of oversight. It was a predisposition to believe that the marketplace was working well and would work fine going forward.

Q. Stanton: Was **house price appreciation** a part of that disposition in the regulatory decisions?

Zandi: To some degree. To be fair, we had not seen house price declines since the Great Depression, and no one thought we'd go back to the Great Depression. We had seen regional house price declines, but "never a correlated nationwide counter-price decline."

If you read some of the speeches that [Fed Chairman Alan] Greenspan gave in that period, you see that thinking. It gave them some comfort that this isn't like the stock market; housing prices are local.

Q. Stanton: **Ratings** -- In 2003, there was a failure of AAA-rated mobile home securities. One of the lessons was not to rely on ratings. Was this a pervasive thought in 2003, and what happened to it? In other words, 2005 was not that far away.

Zandi: As you know, I am employed by a ratings agency and anything I say, I lose because you won't believe me.

One of the key issues is this: Let's say you're sitting in 2004 and we rate bonds. They come up with the ratings, and in 2005, we go back to look at 2004. And the ratings look to be overly restrictive. Credit performance is better than the ratings expected. So in 2005, you say, I've got my models, and you don't change. In 2006, let's say not a single loan in San Diego looks to have been delinquent in 2005. Your ratings are badly wrong and overly pessimistic. And now the pressure from investors intensifies.

[Zandi says parenthetically that he does not work with the Moody's ratings agency. He says his description is "his sense of it."]

The rating agency employee begins to think that the ratings modeling should change if the ratings appeared to be off for three years. "And of course that's the wrong decision," Zandi said.

Q. Stanton: My question was really about the investor and the **manufactured housing experience**, and **asset-backed securities**. Was that a message to investors to do their own work?

Zandi: I think they too got caught up in this. I don't think any of them remembered the manufactured housing debacle, to tell you the truth. That was a very isolated event that people identified with fraud and other reasons, Conseco, etc. I think the CEO went to jail, if I recall correctly.

Go back to that period, and there was a lot of money that was coming in and it needed to be deployed very rapidly. The global investor was overwhelmed, the pipeline was overwhelmed. They didn't have the time or the resources or energy to do that due diligence on their own.

Q. Stanton: When you talk about spreads coming in rapidly, do you mean that there's pressure to do a deal now and not next week?

Zandi: Yes. You say, if I don't go in this market, I'm going to get locked out and that's very self-reinforcing, of course.

Q. Stanton: How much information, understanding the dynamic you described, did they have about underlying mortgages and the extent to which the mortgages conformed to the reps and warranties, and I mean both for the PLS side and the CDO side?

Zandi: "I think they could have gotten the information if they wanted the information. They could have requested to get a randomized sample of mortgages in pools, but again I think they were overwhelmed and didn't have the time or energy to do that."

But this is a good point. One of the most significant reasons for the flaws in securitization was that there was no mechanism for ensuring that the underlying mortgages were really what they said they were. These were stated-income loans; they were based on appraisals; based on comps.

"Nothing in the file was real."

"But no one had a responsibility for making sure that was true. There was no one in the pipeline who had to do that." You could say that the global investor should have demanded that.

Q. Cohen: Do you think there was no incentive to say no, because no one gets paid to say no?

Zandi: Right. That's the regulator's responsibility – at least checking or making sure that someone in the pipeline does that. No one did that. Take the rating agency --they are very up-front about it. They say, I rate their financials and I rate their bond. I think that is now changed, all for the better. I think there needs to be third-party vetting of any underlying data to make sure the loans are really what they say the loans are.

In 2007, as I recall, half the loans were stated-income.

Q. Stanton: And that would have been known to an investor?

Zandi: Yes, everyone knew that.

Q. Stanton: Two decades earlier in the 1980s no borrower would have been allowed to walk in and say this is what my income is, give me a loan.

Zandi: Well actually, two decades ago, that did happen. S&L.

Q. Stanton: **Role of technology** developments that are influencing the way the crisis built and unfolded?

Zandi: Securitized loans were built on poor data, faulty assumptions and poor modeling, and I know this first-hand. Example is house prices – I don't think very many of the investment banks who were issuing these securities knew how to measure house prices and really what they were measuring.

I'll give you an example from my own experience. We were forecasting three house-price series back in 2004 and 2005. It was called the OFHEO [Office of Federal Housing Enterprise Oversight in the Department of Housing and Urban Development] Index series, and there was the Case-Shiller series. They basically tracked. Late 2005 and into 2006, these series begin to diverge, and I got confused. So I rebuilt the models in early 2006, and I produced different forecasts. I produced a paper and told all my clients that this is why we're making this change. I told most of my clients to look at the Shiller series because of the differences – the OFHEO series was irrelevant because they weren't in the subprime, Alt-A loans.

Zandi offered an aside about the psychological impact of the panic: “I’m not sure those conforming loans would have gotten into the mess they got into if we hadn’t gone from crisis to panic.”

Zandi continued: Some of the clients stuck with the OFHEO series, and it just happens that those are the institutions that are no longer with us. I can’t really explain the logic of the decision.

Q. Borzekowski: You mean because OFHEO badly underestimated the downside?

Zandi: Yes. Going back to technology, there was a lack of understanding of data and how to evaluate mortgage risk. Bear Stearns would not even pay. I have a relationship with Case-Shiller. It’s expensive data for various reasons. OFHEO is free. Bear Stearns was saying I don’t want to go by the Case-Shiller data because of the cost, which to me was mind-boggling.

In that case it was the cost, and obviously a misunderstanding, too, right? If you understood what was truly going on, the cost is nothing, looking back.

Q. Stanton: We’ve talked about streams of mortgage originations ... agencies.... securitization... what about **riskiness of loans held by small local banks or thrifts?**

Zandi: Not on my radar, and not material in the grand scheme of things.

Q. Stanton: **Fannie and Freddie** had the conforming market and took reasonable quality compared to what went into securitization. That left others with commercial loans and real estate that was riskier than what they dealt with earlier – did Fannie and Freddie have a distorting effect?

Zandi: I keep going back to the market share shift for Fannie and Freddie that was mentioned at the start.

I don’t think that dynamic [in Stanton’s question] was a significant factor in that period.

“I do think, into 2006 and 2007, Fannie and Freddie were now getting upset about the loss of market share and may have even felt that it was politically threatening because it was getting difficult to meet their housing affordability requirements. So I do think they stepped in very, very aggressively in 2006 and throughout all of 2007 and into 2008, when the book was particularly bad, and took on their balance sheet a significant share particularly of the Alt-A securitizations. And obviously that was a lethal mistake. And if they were a well capitalized institution, I think they’d still be with us. But they weren’t. They were capitalized to a conforming loan with very low default rates, so they went down fast.”

Q. Stanton: It wasn’t only Fannie and Freddie that took on more risk at that time. What are the dynamics of that, when housing prices stop going up?

Zandi: We had a huge mortgage infrastructure in place to produce mortgages. We had a lot of people employed in producing a mortgage in these institutions. In 2006- 2007, when things began to weaken, “that’s when they really started pushing on the pedal to try to keep the pipeline full. “ The decision was to double down and be more aggressive to keep that pipeline full.

Q. Stanton: And there were ample funds?

Zandi: Yes. It was flowing in.

Q. Stanton: Was there a larger credit bubble before the mortgage/housing bubble?

Zandi: Yes, the bubble was larger than housing and residential mortgage market. It began there first because there's so much money there. The risk taking, the hubris spread elsewhere. The commercial market "party" began later than in residential because they had been burned after the tech bubble; only got going in 2006-2007.

Q. Cohen: Any big gaps in what the FCIC has been exploring that FCIC should address?

Zandi: I can't think of any gaps.

Q. Cohen: If you were writing another book, what would you spend more time on?

Zandi: Fannie and Freddie. Now that I've learned more, it certainly deserves a chapter. It's key to the policymaking and how we structure housing finance going forward.

There is a consensus developing that Fannie and Freddie will be significantly diminished and will be replaced by an explicit government guarantee to provide catastrophic insurance for securitization.

Q. Cohen: Corporate compensation – any thoughts on recommendations?

Zandi: Clearly important, but not my area.

Q. Simendinger: You said the handling of Lehman was a policy mistake. To follow up, what are the important lessons drawn from that, looking ahead?

Zandi: Beginning with Fannie and Freddie, then Lehman and then the series of failures that followed, I think the policy mistake was that each of the failures was treated as a transaction: 'I just need to get this deal done.' There was no overarching, comprehensive perspective – what would be the fallout from doing all these different things. It created angst and uncertainty. "All the creditors of these institutions thought their investments were up in the air and they wanted out immediately; they just all ran for the door. So that's what created the panic. It was the lack of any coherent strategy with respect to each of these problems."

It was happening fast. They were exhausted. I'm not saying anyone could do any better.

Q. Simendinger: Was there a way to have communicated during that period any better to be more reassuring?

Zandi: If we got to Lehman, they should not have put it into bankruptcy. The argument is that they did not have the authority. I just don't buy that, I don't. "There is a way around everything if the system is going to fall apart." There was a lack of understanding of what the fallout would be.

Q. Simendinger: You're saying there was a lack of conceptualization about that?

Zandi: Yes. And also some nuts and bolts. Where are all the securities, and what happens if they're worth nothing? That's a simple question that needs an answer, right? And if we'd had that answer, they found out it was the reserve fund, and they might have decided why don't we find a way to keep this going for another week, until we figure that out?

I think that was just a huge mistake, a huge mistake.

Q. Simendinger: You said unemployment may not have peaked. This report comes out in December and will be read by people from all walks of life. Should the report reflect a situation in which we are IN the crisis – in other words, it is not written as if it is past tense?

Zandi: "I don't think we're through. I think we're past the panic, but the fallout is very palpable. I think we're still in it. We have a 9.5 % unemployment rate. We're still in the soup. And if we go back into the soup, there is no policy response." The Fed fund rate is at zero. No one wants any additional stimulus. It's in the present.

Q. Simendinger: You said historically there is a financial crisis about every 10 years. In the FCIC report, is that what we should tell the public they should expect?

Zandi: Yes. We can mitigate the severity of those crises, and we have, with better institutions and better management. It used to be every five years.

It goes to the human psyche. It takes about 10 years for senior management to roll over. The next guys who come in think they are better, brighter, smarter models.

"And you know what, we blew it badly. Our generation blew it. It's just a travesty what we did."

Q. Stanton: Who got this right and why?

Zandi: "You know what, I don't think anyone got it just right. I think we all got caught up in this in one way or another. There are a few who got it right and are pretty rich, but even there, in a completely randomized world someone is going to succeed like that.

"What made this crisis so unique is that it engulfed everybody and everything. I don't think anyone did it right, exactly right."

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