MEMORANDUM FOR THE RECORD

Event: Meeting with Alan Greenspan, former Chairman of the Federal Reserve Board of Governors

Type of Event: Group interview

Date of Event: March 31, 2010, 10:00am

Team Leader: Dixie Noonan

Location: Greenspan Associates conference room, Washington, DC

Participants - Non-Commission:

- Dr. Alan Greenspan, former Chairman of the Federal Reserve Board of Governors
- Lisa Whisenhunt, Greenspan Associates
- Brian Brooks, O'Melveny & Myers LLP
- A.B. Culvahouse, O'Melveny & Myers LLP

Participants - Commission:

- Dixie Noonan
- Tom Greene
- Bart Dzivi
- Greg Feldberg
- Karen Dubas

Date of MFR: March 31, 2010

Summary of the Interview or Submission:

This is a paraphrasing of the interview dialogue and is not a transcript and should not be quoted except where clearly indicated as such.

NOONAN: When can we expect to receive your written testimony?

GREENSPAN: I'll try to make it by Friday, but it's 50-50. Definitely first thing on Monday.

NOONAN: Thank you for meeting with us and for coming to testify next week. As you know, the focus of next week's hearing is housing and securitization, and that's where I'd like to begin today.

Could you please describe how you viewed the Fed's duty to protect consumers against unfair and deceptive lending practices under the Home Ownership and Equity Protection Act (HOEPA)?

GREENSPAN: I'm puzzled by the extent of the allegations that the Fed did nothing. In my day-by-day experience, I was confronted with a very large Consumer Affairs division of one to two hundred people who know as much about that subject as anyone. We have a subcommittee of members of the Board that oversaw the whole thing. There was considerable activism. I sat through innumerable meetings on HOEPA. The issues came up quite often.

My records show that we started off trying to devise how we would structure rules relative to HOEPA. We had hearings around the country that a lot of members of the Fed went to and reported to the Board as a whole about what was going on. From that we developed a set of rulings that have held up to this day.

We discussed the scope of what was under our jurisdiction and a number of issues about what had to be prohibited and issues of disclosure. There was a very significant initiative on financial education. As the years went on, there was a huge number of interagency guidance for regulated institutions.

When the issue came up that we didn't make a good faith effort with the law, I thought what are they talking about? For that to be true, you have to have a whole lot of people at the Board level and throughout Consumer Affairs conspiring not to meet our statutory obligations. At the Fed, we have the best banking lawyers in the nation. You can't get a better group of people to advise the Board about what the intention of Congress was—not only about what the law says, but what Congress had in mind when they passed the law.

A lot of legislation, in order to get passed, the language is fudged, and they leave it to the regulators to interpret what the fudged language means. The question was what could the Fed do that best complied with the intentions of the Congress as well as the language of the statute itself?

For the life of me, I couldn't quite get this unusual history. That is not the history that I remembered.

NOONAN: Most of HOEPA focuses on mortgage refinancing, but there is a provision for the Fed to protect against much broader unfair and deceptive practices concerning all mortgage lending. I am trying to distinguish between high-cost refinancing rules under HOEPA and the part of the statute that tells the Fed to regulate against broader unfair and deceptive practices. What do you recall about internal discussions of regulating against unfair and deceptive lending practices more broadly?

GREENSPAN: I have partial recollections. One of the problems is that the notion of what is unfair and deceptive is not objective. There are certain practices so egregious that it's black and white. For example, flipping refinancing in short order—getting people to turn over their mortgage in order to generate fees—that's egregious. In order for that to happen, the bank or the broker has to say that this is to your advantage, and that's not the case. It's a factually based question. Does that actually benefit the homeowner?

When you get away from that sort of issue, it gets very fuzzy. These partially require jury trials to decide whether that's unfair or deceptive. I didn't study it, but that's what the people who did study it told me. If you're dealing with language that's not exact, my recollection is that I heard lots of complaints that you need better guidance from Congress about what is unfair. We did get some help, but there was some reluctance from Congress. The House Financial Services Committee—or maybe it was the House Banking Committee back then—and the Senate Banking Committee did offer some guidance, and I thought that helped. I thought the Fed was complying appropriately with the intent of Congress at the time, and it's only in retrospect that questions arose.

I was in countless meetings on this subject, but I couldn't pretend to have the kind of expertise on this subject that the staff had.

NOONAN: I understand that the Fed enacted HOEPA regulations in 2001. Was there ever a time when more information was brought to the Fed about the housing bubble which raised issues about some of these lending practices?

GREENSPAN: I doubt it very much. As I say in the Brookings paper, it wasn't the subprime market *per se*. It was only when the securitization market began to put very significant pressure on the issue and underwriting standards began to fall. The trigger was subprime mortgage-backed securities, not subprime mortgages.

NOONAN: The system underpriced the risk?

GREENSPAN: Yes, throughout the system. You determine underpricing by how much capital is needed to guard against tail events. Because this was underestimated, when the system breaks down you're substituting sovereign credit for private credit. The government is giving cost-free capital at the taxpayers' expense. That's the statistical consequences of not having enough capital. The entire system was undercapitalized, and no one was aware of it.

In 2006, all of the major countries met in Basel and talked about risk-based capital requirements. That system was underpriced, and it meant that all of the assets produced at a higher price than would have been the case now.

NOONAN: You have written that if subprime mortgages hadn't triggered the crisis, that some other market or product would have. Do you believe that the risk of all assets was underpriced? The reason many have given for why subprime mortgages were underpriced was because of the historically low default rates in the U.S. real estate market?

GREENSPAN: I think it was universally underpricing risk across all asset categories. It had nothing to do with subprime mortgages. This type of pricing comes out of a sophisticated risk management system developed over the decades. From a mathematician's point of view, it's an extraordinarily elegant system. But you have to put good data in and if you don't have good data, you'll get misrepresentations.

The solution to all of the problems that we're looking at is generically higher capital. There is no substitute for that. If Bear Stearns had been required to hold more capital, it would not have failed.

NOONAN: Who dictates what the capital level should be?

GREENSPAN: These are the investment banks, so it's an SEC issue. But I don't blame the SEC. Even in the banking system, which is heavily regulated with full-time staff in place overseeing these institutions—they were letting toxic assets in.

There is this view that regulators have some amazing insight, which they have in retrospect, but not at the time. Regulations which require a forecast have a woeful probability of breaking down. I think the solution is regulations that don't require forecasting. What is not clear are all these things that are listed in the Brookings paper.

Every regulator around the world failed because of simple missing capital. The problem is that unless you raise capital, they're getting an uncompensated subsidy, and it's ultimately a taxpayer subsidy.

NOONAN: The Fed was intimately involved in the Basel accords, which set capital requirements, wasn't it?

GREENSPAN: Absolutely, although we never signed off. We were as culpable as everyone else. Who was not culpable? If you wrote them down, you'd have a blank sheet of paper.

With the exception of very minor areas—like forecasting that inventory liquidation cannot continue indefinitely—everything else is probabilistic. A forecast will always look like a bell curve. After the fact, a few people will always get it right, but they were guessing. The trick is to guess which people will get it right, but there you will fail. Whenever you get people who forecast a particular market event, you've never heard of them before.

NOONAN: Returning to the Fed's role in consumer protection issues and the fair lending exams that the Fed would do – the Fed in 1998 adopted a formal policy that it said had been its unstated policy all along of not examining nonbank subsidiaries of bank holding companies for consumer compliance. Why did the Fed adopt this policy?

GREENSPAN: That decision was made in conjunction with the Consumer Affairs area. I don't even know if that would have gone to the Consumer council. There always has to be a judgment about what is and is not feasible. Merely regulating in itself is not a success.

The reason is that there are lots of things that you cannot catch. What I think is that this is a problem of moral hazard—if you examine an organization incompletely, they tend to put a sign in their window that they were examined by the Fed. There is a limited amount of resources that the Fed has in terms of examination capability.

There were many meetings about how you allocate your resources. Those decisions are made largely within the divisions—Consumer Affairs and Supervision and Regulation—and then the recommendation comes up through the subcommittee of the Board to the Board for discussion. The staff will give its reasons for its recommendations, and the Board will decide if it's sensible.

I do know that the Fed operates with unappropriated funds. We would always be extraordinarily cautious about our budgets. The Board would also look at the Reserve Banks—we had Consumer Affairs functions in our Reserve Banks. Where the particular consensus came from was whether it was a resource issue or a fear of partial supervision. Partial supervision is dangerous because it creates a good housekeeping stamp with negative feedback. It's not easy to know.

I do remember that decision being made, and I voted for it because I found the arguments rational and they made sense. This is a reason why the Board is getting an unfair rap on this stuff. We didn't forecast better than anyone else; we regulated banks that got in trouble like anyone else. Could we have done better? Yes, if we could forecast better. But we can't. This is why I'm very uncomfortable with the idea of a systemic regulator, because they can't forecast better.

NOONAN: The recent decisions by the Fed to promulgate HOEPA regulations against unfair and deceptive lending and to reinstate examination of nonbank subsidiaries for consumer compliance – are they the right call?

GREENSPAN: I suspect so. There are a lot of calls that are made that are 60-40. They are based on judgments that we know might not be correct. I know the way that the system works, and I would be very surprised if I came to a different conclusion. If you get to a consensus of a large group of people—it's not that they get it right, but they've covered all of the issues.

NOONAN: Substantively, do you think this is the right call to target abusive lending practices?

GREENSPAN: It seems reasonable, but I did not sit in on the meetings and I have not seen the details. I'm giving you my impressions.

BROOKS: You're talking about abusive practices. Can you give us more details about what specifically you're thinking about?

NOONAN: The July 2008 regulations apply to all higher-priced mortgages, as defined. I ask to get a sense whether this would have been a good idea going back in time.

BROOKS: The interest-rate spread isn't an abusive practice.

NOONAN: If it is a higher-priced mortgage, there are four things that the regulation prohibits. That's what I'm referring to.

FELDBERG: I think that at the hearing they'll be interested in the unfair and abusive practices as well as the underwriting standards.

GREENSPAN: We don't even have a subprime market, and if it comes back, it will come back in a different structure. There are so many ways to fleece the public. If you apply the 2008 criteria to a wholly new market, you want to make sure that you're making the regulations consistent with what has emerged.

FELDBERG: The Commission's charge is backward looking. What policies could have been in place to prevent what happened?

GREENSPAN: I was at the Fed for eighteen and a half years. I don't have access to the detail or scope of the Fed now, but I'll try to put together whatever I can. If not before the hearing, I certainly will try to do it after the fact in written answers.

NOONAN: When banks make applications to the Fed for mergers or acquisitions, one requirement is Community Reinvestment Act compliance. What did the Fed consider in this respect, specifically with respect to commitments?

GREENSPAN: This was idiosyncratic of the individual firm. The Consumer Affairs examines consumer compliance for all firms. When an acquisition comes before the Board, we would look at previous examinations, and oftentimes standards had not been met, so the requirements of the merger would be to meet the standards going forward.

NOONAN: Shifting gears from the consumer and community affairs. What was the Fed's role in supervising the safety and soundness of institutions engaged in subprime mortgage lending?

GREENSPAN: You have to distinguish between pre- and post-securitization. After securitization, the data goes straight up. In the early years, the issue was not systemic problems. It was prudential examinations for safety and soundness because home prices were moving up and foreclosures were moving down, and the banks were in reasonably good shape. At that point 70% of subprime mortgages were fixed-rate—this is in 2000-2001.

The importance of that is that the real problems in subprime started with adjustable-rate mortgages. It should give you some notion of the nature of the changes. The rate of increase in adjustable-rate mortgages is like a "hockey-stick curve" because they are increasing slowly and all of a sudden jump way up. The egregious lending practices emerged with adjustable-rate mortgages. The fixed rate did not seem to be a problem. People had lower down payments, foreclosures were going down, so there was no stress in the market.

Things changed with securitization after 2004, but I don't know about a safety and soundness problems. Prices were going up, no one was folding, and there were very low foreclosures and delinquencies. From a prudential point of view, they were in very good shape. Examiners basically looked at the quality of the loan performance and portfolio.

For very large institutions, the Comptroller of the Currency can no longer go in and look at the documents themselves. The banks were getting too large to do the types of examinations that were standard fifty years ago. This is why I always argued that the first line of defense is counterparty surveillance. If that fails, the ability of bank examiners to do their job is in trouble.

I know in general how all of that is done. As banks got more and more complex, I got more and more nervous. It's difficult to know what's going on. That's why I'm such a strong advocate for capital. There are losses, but the losses accrue solely to the shareholders, and it makes them more conscious of the types of risks that the institutions were taking.

Something had to happen in the change to securitization. I wasn't aware of it at the time. The optimum number of bank failures yearly is not zero. Unless there are competitive pressures…. Not all banks should succeed, if they do, then they're being subsidized somehow.

The data show that the markets had generally been securitizing 50% or less of the securitizations. Looking at the stock of subprime mortgages, 50% or less were held as collateral in escrow for securitizers. It was fairly stable.

Starting in the mid-year of 2003, looking at the quarterly data, that all of the sudden begins to take off. It's clear that at that time, something significant was happening. In the early stages, securitizations were good. It takes the originations in highly leveraged institutions—banks—and puts them in the market where the buyers had higher levels of equity. That was true in 2004, but not later on.

NOONAN: What role did the GSEs play in the securitization story?

GREENSPAN: They'd create the securitizations from private-label mortgages. At that time they were losing market share. Fannie and Freddie were significant purchasers of private-label securities. I don't have any data on them buying mortgages and securitizing them. Their public reporting is more opaque than any in the private domain that I've seen.

NOONAN: Did they drive subprime securitization?

GREENSPAN: From a demand side, they were a very important and critical force.

NOONAN: Did derivatives like credit default swaps and synthetic CDOs exacerbate the size and impact of the crisis?

GREENSPAN: In part, yes. They were relatively new. The big part of derivatives are not credit default swaps.

CDS in their early years were very valuable. But they are fundamentally different instruments than interest rate derivatives, because they insure principal. What happened to CDS was that the demand became so great that by 2005 the Federal Reserve Bank of New York (FRBNY) became concerned about the problems. At that time, I felt uncomfortable about this 21st century vehicle being transacted with 19th century technologies like a pen and paper.

The FRBNY has cleaned up a lot of problems. There's no question in my mind that there were practices involved in employing CDS that didn't help things. But there are many things that CDS are accused of doing that they didn't do.

NOONAN: You recommend increases in collateral requirements for financial products in your paper. Would significant increases in collateral requirements for derivatives have lessened the impact of the crisis?

GREENSPAN: That's a very interesting question. That's one part of my Brookings paper that I have to complete, and I haven't finished thinking through this issue. I don't know yet. I'm required to finalize my Brookings paper and I have to say what I mean about collateral. I'll come up with something. I have to go through a sequence of analysis.

FELDBERG: One of the aspects of credit derivatives market is the concentration of counterparty exposure. What's the solution?

GREENSPAN: I don't know. AIG, for instance, was an extraordinarily well-run operation for decades that sold insurance. You can sell insurance as a contract or a CDS. One of the things that CDS gets a bad rap for is that, to be sure, AIG was selling protection through CDS, and the risks that they took were enormous, but they could have done the same thing through insurance contracts. You can't blame the instrument in this case. To say that CDS are the cause of AIG is wrong. If they couldn't have had CDS, they would have had the insurance contracts instead.

DZIVI: They didn't have to have capital reserves against CDS, but you do have to have capital to set aside against insurance contracts.

GREENSPAN: That answers my question.

NOONAN: Insurance regulations also require the buyer to actually have an interest in the exposure being protected against, but this rule doesn't apply to financial derivatives, including credit default swaps. What role do you think naked CDS played in the crisis?

GREENSPAN: There's a question here that naked shorts are—in and of themselves—that issue is not clear. I'm not sure that you can apply that to commodities, stocks, etc. I'm conflicted by that.

FELDBERG: Was there regulatory capital arbitrage?

GREENSPAN: I suspect that's what happened. As I say in my Brookings paper, what regulators can prohibit is regulatory arbitrage.

That's not a good thing. If regulation is going to work, you can't simultaneously have regulatory arbitrage.

FELDBERG: To what extent was off-balance sheet securitization involved in regulatory arbitrage?

GREENSPAN: I have no way of knowing. I can assume that happened to some degree.

FELDBERG: Does it hide the amount of leverage?

GREENSPAN: No, it doesn't hide leverage. What drives this whole process is euphoria. In human nature, risk aversion declines dramatically and there's a demand for risk-based products that can turn on a dime. People didn't mind buying products that could be extremely risky to them. Euphoria is a human trait. If you get a protracted period of economic stability where markets are functioning well, you let your guard down. It's a normal rational human process with terrible consequences.

FELDBERG: The Senior Supervisors Group examined some of the companies that did and did not lose a lot of money in the crisis and identified risk management practices that the good firms had. What could regulators have done to identify these in advance?

GREENSPAN: It's based less on regulators and more on the individual culture of the institution. It's not that there is more or less regulation, but that the risk management at some firms is more sophisticated. With risk management, you start off with the premise of: what your tolerance is for risk?

If you are a partnership—like Goldman Sachs, Bear Stearns, or Lehman Brothers before 1970—my recollection was that they were scared and would not lend you a dime overnight unless you were highly secured. We never had investment banks go under because the incentives structure was different.

If we could get back to the type of views that existed—we can't go back, because the complexity of the system is such that it can't function with partnerships—but if we go back to the culture, it's not an accident that JPMorgan did better than Citigroup.

BROOKS: We promised not to disappear after 60 minutes, but are there other issues you need to address today?

DZIVI: This is a peer review report from the FRBNY bank supervision group. Would this have come to you?

GREENSPAN: No, I've never seen this before.

CULVAHOUSE: Can we keep this?

DZIVI: Yes subject to confidential treatment. On Page 28 it refers to the supervision of LCBOs, Large Complex Banking Organizations. It states in part:

> The level of staff allocated to corporate compliance supervision needs to be expanded in view of the increased regulatory attention to compliance issues and to governance gaps

> that pose legal and reputational risk exposure to LCBOs supervised by the Second District.

I've looked at the work papers behind this and this refers to Citigroup. The Citi team did not have enough resources allocated to it. Did it ever bubble up to you that the FRBNY did not have adequate resources?

GREENSPAN: I've never heard of that. I do know that they—Spillenkothen—allocate their resources to various different things that I never saw. I've never been involved in any of that. It's a judgmental question of what resources were required. My recollection is that when any of that surfaced to the Board, it was met with funds.

We took very seriously the monitoring of the spending of the whole system. Because you're not dealing with appropriated funds, it's very obscure how our actions deal with the federal budget. We are dealing with taxpayer funds without supervision, and we took that very seriously. Having said that, when issues arose where the use of taxpayers' funds to deal with that was in line with the needs of Congress, we would address that. A contentious issue was the building of new buildings. But I don't remember any request for money for supervision that was not met.

DZIVI: Next I would like to draw your attention to some minutes of a Board of Governors meeting that occurred on September 30, 2002 (page 3, "Aftermath of Enron"). The second paragraph recites your observations. I'm interested in the statement that

> "the information presented did not reveal wrongdoing by Citigroup"

GREENSPAN: I've seen documents like this.

If it's in the minutes, these are scrupulously done, and I must have said it. If I said it, I must have had reasons, but I don't remember what those are. I was very careful in what I said, because although I only had one vote like everyone else, I was aware that what the Chairman says carries extra weight. I would not have said that without having hard evidence to back it up

DZIVI: The next set of minutes I'd like to draw your attention to is dated October 28, 2002. This involved the approval of the Cal Fed acquisition by Citigroup. Look at the second full paragraph of page 3.

> "Chairman Greenspan observed the potential compliance issues in this proposal required the Board to make realistic judgments in balancing responsibilities to the economy and the regulation of financial institutions."

At this period in time, CitiFinancial is undergoing a compliance review with Board examiners that results in a $70 million fine. Can you tell me what you meant by your statement of "balancing its responsibilities related to the economy and the regulation of financial institutions"?

GREENSPAN: The Board has dual roles. On the one hand, we run monetary policy and are responsible for what is going on in the economy. We are acutely aware that regulation is not irrelevant to what is going on in the economy. How do you trade off the regulation of financial institutions and the monetary policies that affect them?

I don't remember the considerations of this case specifically, but that's in general. You can't view regulation of a central bank independently of its mission to provide liquidity.

DZIVI: On a quarterly basis, how often did you have meeting with Spillenkothen about bank supervision?

GREENSPAN: Unless an issue is brought directly to the Board, we wouldn't discuss that. We did talk about the $70 million fine.

DZIVI: The next set of minutes I'd like you to look at are dated March 16, 2005.These involve the approval of Citigroup's acquisition of a small bank in Texas. On page two it states:

> "The order would convey that."

In the three years up to this order, Citigroup and Citibank had compliance and public relations problems, and the Board of Governors put a growth moratorium. What do you recall about that?

GREENSPAN: The Board was dissatisfied with the compliance of Citigroup. It was the judgment of the Board that until they resolve these issues, the moratorium would stick.

DZIVI: When it was lifted in 2006, what was the Board's view?

GREENSPAN: I remember when it was lifted and I do recall discussions generally.

CULVAHOUSE: I'd like to point out that Dr. Greenspan stepped down as Chairman in January of 2006. Was the ban lifted before he stepped down?

FELDBERG: It was lifted sometime in 2006.

NOONAN: I believe it was after January, but I would have to check to be sure.

CULVAHOUSE: Would this be an area of questioning at the hearing?

GREENE: It might be. He shouldn't spend an inordinate amount of time studying it.

NOONAN: There's no expectation that you spend much time preparing on these questions. Our invitation letter to you did not ask you to address Citigroup.

BROOKS: I don't want him to be in a position of commenting on things that he had no knowledge of.

GREENSPAN: I stepped down in January of 2006. I remember it being discussed throughout the period.

NOONAN: We will let you know when the ban was raised.

END at 11:26am

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