

MEMORANDUM FOR THE RECORD

Event: Interview of Bob Behal, Vanguard Structured Finance

Type of Event: Phone Interview

Date of Event: May 4, 2010

Team Leader: Brad Bondi

Location: FCIC Offices, 1717 Pennsylvania Ave., Wash., DC

Participants - Non-Commission:

- Bob Behal, Vanguard Structured Finance Credit Analyst
- Nathan M. Will, Associate Counsel, General Counsel's Office

Participants - Commission:

- Bruce McWilliams
- Tom Greene
- Landon Stroebel

MFR Prepared by: Bruce McWilliams

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MFR Reviewed by: Alexis Simendinger on November 30, 2010

Summary of the Interview or Submission:

Bob Behal is a senior analyst and the co-head of credit research for asset-backed securities within the fixed income group at Vanguard. He has been with Vanguard for two years.

Behal did not answer questions in useful ways. He could not name people he dealt with at Moody's; nor could he say much about the failures of the rating agency processes; nor did he address how the rating agencies change over time. He didn't consider himself a "quant."

He said that the degree of subordination declined and the relative size of AAA tranche increased in the middle of the decade. The data used in the models grew increasingly irrelevant as originators offered different mortgage products.

He said that if the subprime pool had a 2%-5% expected loss rate, it was multiplied by 4X to 5X, to give a loss rate of 8% to 25%; if credit enhancement covered this stressed loss rate, the fund could earn a AAA. However, losses exceeded even this rate during 2007-2008.

What's your background:

At Met Life, in investment 1997-2000

Oppenheimer funds: 2000 -2006

Senior analyst ABS CMBS,

Alliance Bernstein 2006-2008, vice president, predominantly ABS research

Vanguard, co head of ABS and CMBS analyst

At Bernstein I analyzed RMBS, agency RMBS

Non-agency RMBS

Some than less than prime

Investor in structured products in 1997 as investor role for ABS CDO, including structured products

Help run team at vanguard. I used and interacted with the rating agencies.

What did you look for?

For structured product, each pool has its own rating. In the ABS market, you get supporting information from rating agencies. You had exposure to rating method and you had to understand it.

As an investor in the market, I wanted to understand the methodology But I wasn't a quant.

In rating a transaction, you have to look at ratings, look at collateral, look at quality of structural support. For any given transaction, you need to look at each part.

For the downgrade in 2007, the surprise was the magnitude of the sector. Thousands and thousands of CUSIPs [Committee on Uniform Security Identification Procedures], a high correlation of risk. Systematic

How did RMBS market change?

Huge deviation of loss pool from 2000 to 2007. To have this event, in the early months of transaction to have a loss in the pool. There wasn't much supporting loss data.

I was a participant in late 90's to 2000 for subprime. Much different profile for mid decade, Production pipeline really ramped up.

Much more conservative approach from rating agencies in early part of the decade.

In early part of the decade, they weren't willing to take assumptions, which they later made, given there was no supporting data.

For example, not all mortgages with same FICO react the same. Or the assumption that home prices will always go up. Or if the rate of change in home prices slows down. And home buyers may have 1st 2nd or 3rd mortgages. (never heard of a 3rd mortgage.)

Toward the middle the decade, rating agencies may have made assumptions without relying on supporting data.

At Allianz Bernstein, we tried to establish base case, worst worst case scenario. Even our worse case assessment may have been off in the magnitude of loss that later occurred.

In 2006, did you see divergence in AAA credit quality?

Saw more FICO, more high growth states, 2nd liens. As the market started asking questions about low FICO/2nd liens.

Tom Greene asks about subordination:

In 1990s, rating agencies had more subordination. More tranchings. Many more layers. That was trying to maximize leverage. A decline in credit support available for transactions. Rating agencies were getting more comfortable with underlying risk.

Behal was unsure if there was more AAA later in time. Certain pools may have had higher credit score and less credit enhancement.

Tom Greene: One way to make a pool good would be to include mortgages from different markets. Were the models using shorter time period so that the results would be better?

One of the flaws is that there was lack of empirical data, and they had to make assumptions. This might not have reflected the reality.

1998-2003 history: There was a history of non agency performance (1% loss); there was history of subprime (2% to 5% loss). To get to triple AAA enhancement, the methodology was to multiply x 4 or to 5X. [so if it was assumed there would be 8% to 25% loss, the issuer would

seek guarantees or interest coverage]. But the actual experience was much greater in 2007. These were the fundamental problems.

There was a decline in credit enhancements over time. It was two year time period. Where there was a flurry of transactions in 2006-2008.

As the 2-28 loans [2 years fixed, 28 years adjustable] became more prevalent, did you have discussions with the people of the rating agencies?

Once those early payment defaults came through, 2007, 2008, it was too late.

Was there a point when you became skeptical of ratings?

Yes, there was definitely a concern. The surprise came in how systematic the fall was.

One of the things I saw was that delinquency trends were ramping up at an alarming rate. Late 2007. We saws mortgage pools with little seasoning with early defaults.

We would get transactions data from trustees.

Did you perceive rating agency were reducing rating on timely basis?

When ratings downgrades were occurring, they would put on calls. The rating agencies asked me to be part of Investor Councils.

Where home prices weren't falling, but there were alarming delinquencies, that was a sign of fraud.