Yale SCHOOL OF MANAGEMENT
Program on Financial Stability

Lessons Learned Oral History Project Interview

Interviewee Name and Crisis Position	Eric Kolchinsky[1] Managing Director, Moody's Investor Services
Interviewer Names	Steve Kasoff Former Partner, Elliot Management Corp., and International Center for Finance Advisory Board Member, Yale School of Management Matt Lieber (Independent Contractor) Yale Program on Financial Stability
Date of Interview	December 22, 2020
Lessons Learned No.	2020-46

Introduction

The Yale Program on Financial Stability (YPFS) contacted Eric Kolchinsky by email to request an interview regarding Kolchinsky's experience at Moody's managing ratings of structured securities.[2] Kolchinsky started his career in structured finance with stints at Goldman Sachs and Merrill Lynch. He joined Moody's in 2000 as Vice President for credit, from 2005 to 2007 at Moody's Investor Services, he was a Managing Director of ratings of ABS CDOs. In 2007, Kolchinsky was moved to Moody's Analytics to supervise methodology for structured finance valuations. In 2009, after Moody's suspended Kolchinsky, he testified to Congress about fraudulent ratings agency practices and conflicts of interests. Since 2009, Kolchinsky has served the National Association of Insurance Commissioners where he is presently Director of Structured Securities and Capital Markets.

This transcript of a telephone interview has been edited for accuracy and clarity.

Transcript

YPFS (Matt Lieber): Tuesday, December 22nd. Yale Program for Financial Stability. Steve Kasoff, Matt Lieber here. We have got our guest Eric Kolchinsky. Eric we are delighted to have you, thank you for your participation. From the National Association of Insurance Commissioners and formerly with Moody's Analytics. Eric, welcome and thank you for joining us. Can you start by telling us your personal background, your professional background, how you got from studying aerospace on the west coast to Wall

[1] The opinions expressed during this interview are those of Mr. Kolchinsky, and not those any of the institutions for which the interview subject is affiliated.
[2] A stylized summary of the key observations and insights gleamed from this interview with Mr. Kolchinsky is available in the Yale Program on Financial Stability's *Journal of Financial Crises*.

Street? And what led you to be interested to go work for a rating agency before you got into the high precipice of things?

Kolchinsky: No problem. First let me start saying that I am speaking only on my personal behalf and my recollection of what happened during crisis, not on behalf of the NAIC. None of my views represent the views of the commissioners. Let us see, brief background, I am an immigrant from the Soviet Union, came to America when I was nine. We were primarily in between St. Louis Missouri, and Brooklyn, New York. Graduating from high school I wanted to go where it was warm. I missed the deadline for the UC campuses. At least when I was young, I was a better test taker than I was a diligent worker, procrastinator, still am. Left things for the last moment. I missed the deadline for UC. I went to USC, had a nice time studying aerospace engineering. By the time I was graduating there were no jobs in the aerospace. I did not want to get a PhD in aerospace, or related technique. Somebody was talking about law in the gym when I used to go to a gym a lot and I was like, "OK, well what do you need to study? I don't have any political science or anything like that." "Yeah, nothing. Doesn't matter, just tests and grades." I have tests and I had grades, so went to NYU law. I realized I did not want to be a lawyer, so I also got a joint degree in stats from a business school. And managed to get my way into Goldman Sachs where I worked in the CMBS side. I was in investment banking, that is where my issue with working long hours revealed itself. I had a real problem as you can imagine at Goldman Sachs. I am great under a lot of stress, but the long hours I could not take. I went to Merrill, that is where I met Steve. When I had kids, I realized I needed to get more serious. I became a lot more diligent of a worker. Still, better in a crisis than a hard worker. I tried Lehman Brothers for a year in 2004-05, then I went back to Moody's. In time I rose to Managing Director in the CDO group, where I ran ABS CDOs, both cash and synthetic. We will talk about what happened that I was forced to leave that group. I went to Moody's Analytics with my boss and mentor Gus Harris. But I went ahead and did something stupid and became a whistle blower. I was very lucky, after that – I landed at the NAIC first as a consultant, and now I have been there full time for seven years. There are two groups that I run. One is the Structured Securities Group. At that point the regulators decided to not use rating agency ratings to set capital, so we have a hybrid approach -- and we can talk that in your last section-- where we outsource our analysis to currently BlackRock. But rating agencies, it is done under contractual basis, we oversee the process. We create a process, et cetera, et cetera.

YPFS (ML): Great. That does sound like something we will want to come to on how that is evolved. Going back to your initial experience with Moody's, could you tell us about the original methodology for rating CLOs?

Kolchinsky: I think you are referring to the binomial method, right? Just the way they measure correlation, or everything else? Just the correlation part, right?

YPFS (Steve Kasoff): Yes, and yes. Very briefly, why that is important. But certainly, the question of correlation is very relevant to this conversation.

Kolchinsky: In terms of models, the binomial model had zero statistical basis for it. It was a heuristic. It was a heuristic that worked quite well, given the number of categories and sectors. It made some assumptions in terms of each industry having some independence. It made some assumptions about being able to take a number of industries and reduce them to IID (Independent Identically Distributed) bonds, and measure their correlation performance with the binomial distribution, hence the binomial. As far as I know, it did not have a lot of sense behind it, but it worked. It was truly what you would call heuristic approach.

One of the first things I was asked when I went on there-- this was 2000-- was to see if we can create more telecom categories. People were overweight telecom debt exposure. And I believe the bank wanted to do a telecom only CBO, this was a CBO (collateralized bond obligation). I cannot remember some of the names. Iridium, was that Iridium the satellite company?

YPFS (SK): Yeah.

Kolchinsky Yeah. Everyone was full of telecom up to their gills. Morgan Stanley wanted to do a telecom only CBO. I started doing again - got my hands-on Excel. Actually, my Excel hands-on no-mouse skills are thanks to that gentleman sitting over there, Steve Kasoff, when I got to Merrill Lynch. You had to do Excel spreadsheets and you had to do them now, and there is no time to use a mouse. I learned, still use them, so thanks for that, Steve.

YPFS (SK): Mice are for amateurs. I will admit that I use a Trackball now. I highly recommend. The reason this is useful background to get into the record is, it is important to note that the question of trying to... I think the rating agencies historically were very focused on the probability distribution of default for an individual company, or an individual bond. And trying to apply that to a portfolio of bonds that have correlations among them and represent that aggregate distribution of defaults or losses, is something that was recognized as an important and difficult task right at the beginning or the structured credit rating methodology. That is something that would continue to get refined and thought about over the years.

Kolchinsky: Yeah. I think that is absolutely right, and I think that was a big deal (with) CBOs. The other rating agencies went straight into a simulation mode. S&P had a black box simulation model. It never quite worked out that well. But Moody's in the corporate default business, and the binomial model, I think it did work well. Not through any study, but it just came out OK. That is the corporate binomial model. Go ahead.

YPFS (ML): Were there other models that were coming into discussion then, and were there conflicts? You mentioned at one-point Eric, you went from one group to another, I think you suggested you had to leave one group.

Kolchinsky: The main difference came through the synthetic side. The cash product and the synthetic product were separate. The cash product on the corporate side still continues to use the binomial model. There was not a lot of competition

there, so that area stayed the same. There was a lot more competition, I believe it was a single rating agency market on the synthetic side. In the early years, I did not really stand on the synthetic side. I had a lot of concerns and questions about how to do it, so I kept my head out of that area completely.

The bespoke market developed, that is where you would have a person coming in. I am very hazy on that because I was not really involved in the corporate side. But it was a single rating agency market and Moody's was not doing as well. This was done out of US and primarily Europe, and it was a European, London-based product as far as we were concerned. And it created a simulation model. It was basically a Monte Carlo simulation, which had asset defaults. I cannot think of the name of the model. You could download it, it is an Excel based spreadsheet, or at least Excel front end. You could put your portfolio in, and it would run the number of simulations and spit out the ratings.

YPFS (ML): OK. I might have conflated two questions. Can you clarify, the question of the ratings and different ratings methodologies emerging? You are being forced to move from one group in 07 to another group.

Kolchinsky: This was before that. This was 2004. I started with the binomial, which worked relatively well. Then, coming out of the synthetics, you started having simulation Monte Carlo models, which worked even better in terms of getting better ratings. It was a lot of market pick up-there. Eventually the consideration was to take that and to apply it to an area where the binomial method was not working very well for Moody's. When I say it was not working well, Moody's was losing business. That was in the ABS (segment), so RMBS-backed CDOs. There is a two-moment method, which I cannot-

YPFS (SK): Moody's was losing business because it was generating ratings that were too low relative to other rating agencies?

Kolchinsky: That is correct. The diversity score that came out was in the low teens. At low teens, basically you had a lot of cliff effects. If you have basically 12 scenarios that you are running, because the diversity score was 12, you could have a lot of cliffs. And when you probably weighted those, you started getting much lower ratings. Especially at the top where you needed the AAA to finance and lower the cost of funding for the deal. That is the takeaway there.

YPFS (SK): Were you involved in developing a new methodology?

Kolchinsky: I was not. This was a time when I was actually at Lehman, so I can actually say that my hands are clean on that one. And it came out of the synthetic side; I was always on the cash side until I came back. That one -- my hands were clean. I remember actually at Lehman, doing a couple back and forth, because the simulation was not a default simulation, it was an asset simulation in a Merton sense. You are simulating asset volatilities and where they would break. I tried to back out of that, a rough sense of default correlation. And the default correlations at the higher ratings level-- so between two singles As or two AAs-- were almost negligible. Basically, the higher in the capital structure, at the

lower default probabilities, the higher ratings, the way it was set up, the default correlation was almost negligible.

YPFS (SK): You mean close to zero?

Kolchinsky: Yeah. It was extremely low. I cannot find that spreadsheet, I did look for it during the whole process. But I remember this was as Lehman was trying to back out.

YPFS (SK): The asset correlations would be the same regardless of what rating you were, or what tranche you are looking at.

Kolchinsky: You're assuming asset correlations, but you are adjusting them to back-- you are simulating asset correlations, and depending on how you hit that default barrier-

YPFS (SK): It must have something to do with the amount of subordination on the underlying RMBS bonds in the deals. Interesting.

Kolchinsky: Yes. That is exactly correct. But the two-moment method was a default correlation. I was trying to compare apples to apples, and it went from something that was small, in the case of a AAA, to less than a basis point of default correlation. It was a significant decrease. I do not know if they thought about it that way, but that is the way it worked out.

YPFS (ML): Back to your earlier point, when Moody's model was generating a 12or low teen diversity score, what was the difference, what were the other ones at? Do you know?

Kolchinsky: I do not know. I did not know it as well. It was a new model; I believe that S&P still had a black box at that time. Meaning, they had a little executable that you would run. You would input a text file with the industry rating, and I think the tenor of the bond. You would do a simulation and it would output numbers. But I think it was a black box. Steve, I think you might remember better than me.

YPFS (SK): One of them, was it CDOROM, was that Moody's or was that-

Kolchinsky: Yeah, that was Moody's. CDOROM was Moody's. Yeah. And that was open, you could see the correlations.

YPFS (SK): I am still thinking about this question of using asset level correlations, which is a sensible approach when you are on the line, is tranches. It does make a lot of sense. I am wondering, what was causing the default correlations, which is an output not an input in this case, to be so low. It means that the asset correlations were wrong. It could also mean that the asset volatilities were wrong.

Kolchinsky: Yeah. It was driven by a correlation, so that would be the case. Part of it was the recoveries, what level you assume the barrier. If you are simulating

volatility, the barrier level has to be set, which was recovery. The implied level of subordination does not work for that bond, in order to trigger that, that was set arbitrarily, that was another assumption. I forgot how that was done. I imagine it was really done to create a competitive diversity score for the market rather than what was real.

YPFS (SK): Appreciating that you were not at Moody's when this was developed, then is it your impression that instead of being developed from a blank slate trying to get the best approach, do you have the impression that it was designed with one of the goals being to try to more closely match the S&P and Fitch ratings at the time?

Kolchinsky Yeah. Of course, absolutely. That is how things work at rating agencies. Even if people do not say it out loud, you got to look at the incentives. If you do not have the market share, you are going to get fired. The way that the rating agency business is set up, the enormously high fixed costs for rating agencies, enormously high profit margins once you add business. My margins, at least I had within my group, I can only tell you how much my group cost salary wise, salary benefits versus... I did not build in all the essential services, but my profit margin on salaries versus revenue was 95%.

YPFS (SK): Wow. That is like a gross margin.

Kolchinsky: Yeah. It does not account building services, all that stuff. But even if you do that, the margin at Moody's overall at that time was 40%, 50%, it was ridiculously high. If you're not keeping the lights on, and you're a publicly traded company, you have a group that's sucking down a lot of money without generating that kind of marginal revenue, you're going to get fired. Nobody has to tell you, "You have to get in business." You are looking at what you are producing, you are looking at your salary and going, "How long are they going to keep me around?" It does not have to be said.

These are smart people... And they told you what your market share was. That was the market share emails that I started receiving when I was managing the group. "Here's your market share, here's how you're doing. Here are the deals you missed. Why did you miss those deals?" Nobody said directly, "Make these deals work," but you knew where it was going. Managers were not fired periodically.

YPFS (SK): Once you had a model that more of less generated very similar ratings as your competitors ... You still did not have 100%, you had something in the 90s.

Kolchinsky: 97ish.

YPFS (SK): What were the reasons that you would lose a deal?

Kolchinsky: The one deal I said no to was Magnetar's re-securitization of their equity positions.

YPFS (SK): But it was you saying no, it wasn't somebody choosing not to use Moody's for some reason?

Kolchinsky: No. It was saying no ... We had tremendous market share and we usually did not miss deals.

YPFS (SK): When you got to Moody's, the second time, in 2005, right around then is when the Pay-as-you-go credit default swaps started getting produced and synthetic ABS CDOs start. What were you guys thinking about, or what did you think of the idea that there was this cottage industry of hedge funds that wanted to short this stuff, that was supplying collateral for these deals to get done?

Kolchinsky: Personally, I do not know if other people knew. I did not know that. I did not, and maybe I should have stopped and think about it like, "Where is this coming from?" I did not process that idea that there was this cottage industry of people who so badly wanted to short, and the banks so badly could not hold all that short paperwork. They needed to figure out a way to dump all those short positions of the CDOs. And I think I said something like this during my testimony-

YPFS (ML): Is that what drove the CDO manager industry to take shape?

Kolchinsky: Yeah, I believe so. Sorry, I am going to punt this one to Steve who is probably seen it. We saw them come up and going back on it knowing what I know, I can tell you... Like Magnetar, talk about Magnetar. All these deals that they, through their vanity, instead of hiding the fact that they were trying to short those deals named after stars, or constellations. That was pure vanity, but it leaves a track. This started showing up, the constellation deals. And again, maybe I am too dumb but I didn't catch on until late that these guys actually seeding the product. They are shorting into the deal. Or whatever the arrangement is, they are short the market. They need a partner on the other side and that partner is going to be an SPV (Special Purpose Vehicle).

YPFS (SK): There's some circularity in this process in that the facts that ABS dealers with cash bonds were getting done in significant amounts, as much of the supply of the underlying subprime bonds existed, that was happening? It suggests that it was not just the shorts. The question, it is the chicken and the egg. The people wanting to short create the need for more CDOs to get done, or was there already underlying demand for the CDOs that was not getting filled because of a lack of supply and it was the lack of supply that brought shorts into the market? I think it was probably more of one and less of the other, but ...

Kolchinsky: It is possible. By the end you had... I do not think anybody is ever done a full study on this. How much of the mezzanine paper actually left the system? Merrill had that with machine. They would place .... equity was I think easily sold. The Super Seniors they retained in a very cryptic method that I do not think that anybody at Merrill Risk understood what risks Merrill was taking. But the

question is, how much of that... Back in physics one of the ways you learn, is you would draw a dash line around whatever system you were studying, you would put in the forces that are coming in, and the forces have to balance. Think about Merrill as a system, we have shorts coming in, how much of that actually left Merrill? And I do not think anyone is ever studied how much risk actually left the Merrill complex. Because they would cross pollinate. They had managers who they could control, and they would tell them, "Hey, we need you to take down these CDOs, the mezzanine slices of the other CDO that we're warehousing," and Merrill took the senior risk. I do not know how much risk ever left.

YPFS (SK): Yeah. Well, I suppose it would depend if they were recycling BBBs into new deals. So that is leaving Merrill. But they are retaining super senior. I do not remember how much super senior they retain. But I am sure if they thought that the risk was remote, then they felt that the risk was leaving. In reality, that proved not to be the case.

Kolchinsky: Have you ever read the UBS report of the shareholders? This was in 2008, UBS, and you remember how active UBS was, got stuck with a lot of mark-downs on CDOs. They had an auditor come in, and they wrote a whole, really good report about all the operational issues they had in their asset manager, and their trading desk, and their underwriting in terms of CDOs. Essentially, they kept all the super seniors. They either created a de minimums risk, or they did the negative basis trade and assumed that the risk... Some of the positions were not even on their balance sheet because they would say, "Well, we had a negative basis trade, we don't have any risk." It is a great read, if you're doing this and you've never read it. Because it really talks about, from a bank's perspective, all the tricks that were done to basically hide the risk.

YPFS (SK): To back up, something you said triggered a thought. We were talking about the question of CDO managers buying- or being pushed to buy-things off of a deal or inventory that was going into a deal or whatever other reason. One of the elements of the rating process at all the rating agencies, was a qualitative assessment of the CDO manager. Can you talk a little bit about how much the CDO manager assessment impacted the ultimate rating process, and how you evaluated managers?

Kolchinsky: For practical purposes? Zero.

YPFS (SK): Whether as a manager, you are perceived to be good or bad, the ratings were ultimately the quantitative output of the models based on the portfolios?

Kolchinsky: For all practical purposes, we never... Even Harding, we never really penalized a manager. Maybe we would be a little bit more... There is no method. With a Harding deal, we would be a little bit more... And Harding ended up being sued by the SEC, I think, at some point. Again, that is another interesting case to read.

YPFS (SK): Is that Wing Chau, was that his?

Kolchinsky: Yes, that was Wing Chau. He, or somebody like him, was in The Big Short. I actually met him a couple of times.

YPFS (SK): No, it was him. It was him that was in that anecdotal story that we are thinking of. I think there is a movie that, they replaced it with a fake name.

Kolchinsky Yes. They did, yeah. Because I think he sued for defamation against... He sued the author of The Big Short.

YPFS (SK): I know. But you had a sense at the time that this, for lack of a better word, symbiotic relationship between managers and certain underwriter-- maybe even an unstated quid pro quo about buying certain things out of inventory-- was occurring?

Kolchinsky: Yeah. We did not have the complete picture. The role of the banker is to keep us in the dark. And if people were chatting about things, we were not in that conversation. People drink, and they sometimes... This is not like people were committing a crime. Those guys do not need to know that. You get it. You have managers who had business before, and they were going to do it their way and you had a Harding who was for hire.

YPFS (SK): There is an argument that has some merit to it that you did not need to know. The reason somebody was buying the bond, why was it relevant if the rating of that bond was accurate. And that was the input into the model, then why did it matter what the motivation of the buyer or seller was?

Kolchinsky: That comes back to the big question I think you have asked, "Why does it matter?" It matters because any statistical model is based on available data. And available data is based on certain events that have occurred in the past. You are sampling from a sample space, from a probability space, and has certain events. And some of those are that the parties and manager had some fiduciary duties. The people who were creating those structures wanted them to survive, did not want them to blow up. The bankers who were creating... Companies are issuing debt based on what they thought they could do. There's certain business rules and relationships that basically, if you think about it, were unsampled variables, because they did not change.

I used to be able to explain this better. I am off my game now. But if you want to think about it as a model, the classic incentives were all the same in who you sampled from. Now, you went ahead and changed the incentive system, so those results that you actually are putting your model on were changed, and it is not clear how. Well, it is clear how they ended up affecting, it changed the whole view. Changing the incentives has a fundamental impact on the performance. And I think we saw that in the financial crisis.

YPFS (SK): The only way to paraphrase what you just said is that there was adverse selection happening. That the market, if you take a sampling of BBB rated bonds, some of those bonds are naturally going to be a little better than BBB and some are going to be a little worse.

Kolchinsky: Yes.

YPFS (SK): And what you are saying is that a manager normally would be expected to choose the better ones.

Kolchinsky: Yeah. Exactly. That is exactly right.

YPFS (SK): And they were doing the opposite because of external incentives.

Kolchinsky: That's exactly right. I used to have a "Lessons Learned" presentation and I had a name for it, something adverse selection. It was not as engineered. But thank you for reminding me. If you want to see it, I had a, "Lessons learned." I was making the rounds with the "Lessons learned" deck for a couple years when people still cared. I know you guys care now.

YPFS (SK): If you find it, we would love to see it.

Kolchinsky Yeah. I have it, it is somewhere.... But that is exactly right, the adverse selection issue. This is the problem with any econometric model. Once people are aware of the model that you are using, they are not random variables anymore because they now know how to model operates and they will make a change to their behavior to comport with the model. If people know the model, they will undermine the model from day one. That is an issue that you have with these - with regulation generally and rating agencies as well.

YPFS (SK): With all regulation in all businesses and industries you have some degree of that problem.

Kolchinsky: Yes. Absolutely. 100%. It is a huge issue. It is an issue I deal with every day now. I think we have gotten off the schedule.

YPFS (SK): Well, not entirely. But this is good, important stuff. I am just looking at where we are supposed to be.

YPFS (ML): When you say, Eric, this is about the types of deals, looking back on it, you should have had different models for different driven deals, like a short-driven deal?

Kolchinsky: Yeah.

YPFS (ML): More of a neutral deal or more of a bank driven deal - or would that have been window dressing?

Kolchinsky: You could theoretically, if you were trying to set up something for a short-driven deal, you would increase correlation because the person who is incentivized to create the portfolio is long correlation. So, you have to assume that the correlation is going to be higher in these deals than it was in the other deals. If you have some variance around your mean default distribution, you have got to assume it is going to be at the higher end of that variance. Assuming everything else, the ratings are correct, you are going to be on the higher end of that barrier. You are going to adjust. Again, there is so many ways that people can undermine the model, but that would have been the gut reaction to that.

YPFS (SK): I never had the impression that when firms like Magnetar were building these short portfolios and there were others that did, most or all of the shorts into a portfolio, there wasn't a goal of creating a higher correlation. They would certainly try and pick the worst bonds.

Kolchinsky: Yes. I think you are right. (But) I think it is a proxy. It would be a proxy for what their incentives are. Normally if you think of a manager's traditional role is to lessen correlation so that you would have a selector whose incentives are to increase correlation. You would increase it, not because of consciously modeling higher correlation, because I do not know how you would measure it, but that is their natural incentive is to increase correlation.

YPFS (SK): The two things I am thinking are, they were trying to pick the worst bonds within a rating category. You could argue that if those bonds were priced appropriately, a manager could still be doing its fiduciary duty, if they had a differentiated view. You are the one-

Kolchinsky Yes. Well, if it were truly priced appropriately. That is the other thing with synthetics. The market there may not have necessarily been a good market where the risk was appropriately priced in general.

YPFS (SK): It was not appropriately priced. We know that in hindsight of that. But I think that it was a two-lane market where it would clear at levels that were not artificial. In the sense that the market may have been wrong, but it was still-

Kolchinsky: Well, you may know about this but in the sense of the synthetic side, did you have any parties that are truly incentivized to price correctly? It was not a trade. You had on the cash side, you had essentially a bid, a lot of which was driven by the CDO as they were taking out the mezzanine stuff, cash CDOs. That is a market driven by actuarial historical returns, plus some pricing. But you have got to make a ROE on your equity piece. There is a constraint there. Plus, on a synthetic side, at least the initial trade was with the short seller and the banker. And the banker knew that, that trade was going to leave their book. At least accounting wise, leave their book. The trader knew what the...

You may know better, (but) this is how I perceive it, I am a trader, I want to invest for the warehouse. Yeah, I am going to take a look at what is happening

in your market and the cash, but that is distorted because it's all going into CDOs. But also, now, look, I am trading, it is going to a deal. The deal's going to go off, (out) the door. And guess what? The team's going to make a point and a half on this deal and that is going to be on my bonus score. I am going to try to get a few extra basis point out of that to get the ROC on the deal working. But my biggest concern is getting the deal out the door, so I am not really negotiating as if I had to live and die by that price. I do not know what you...

YPFS (SK): **It varied based on types of deals. A synthetic deal where you were ramping it up in the market and going out with], where you were trying to piecemeal put together the collateral. Those were real market clearing levels. In the sense that you had competition from different people that wanted to short bonds, you had managers picking the bonds that they wanted to have in their portfolio. In doing so, they were picking a few bonds that they knew were below average because they knew that people would pay more to short them and would generate the right aggregate yield on the portfolio.**

Kolchinsky: But who are the longs on this side? Was there anything besides the CDO bid, either cash or synthetic, on the mezz side? I know on AAA that's-

YPFS (SK): **On synthetic?**

Kolchinsky: No, cash or synthetic. On the long side, how many of those... And forget the agency costs that are involved in asset management in general. Let us assume that straight normal asset management is fairly aligned interest. How much of that long bid for mezzanine RMBS, or mezzanine CDO charges was real cash as opposed to CDO bid, either cash CDOs or synthetic CDOs?

YPFS (SK): **In '05, I would say a meaningful amount.**

Kolchinsky: Yeah. Agreed.

YPFS (SK): **By the time we got to 2006 and '07, I think they probably got squeezed out by the CDO bid. Maybe you had some creative dealers of prop desks, or hedge funds that would try and buy certain RMBS bonds and then short ABS against it to try do some sort of relative value trade. On that basis, that does not really contribute. I would imagine you probably still had some insurance companies and all the real money buyers still there, but I am sure it was a much lower percentage by then. Those buyers that used to buy the BBB tranches of the RMBS, by 2006-07, some of those guys were buying the BBB or single or AA tranches of the CDOs. Not all of that was getting recycled into other CDOs. The math just did not work that way.**

Kolchinsky: We started getting a lot of the high yield deals. We had a high yield CDO squares started happening.

YPFS (SK): I was going to move on to another interesting topic, which is the surveillance of ratings on the CDOs. And particularly the organizational barriers between the CDO group and the RMBS group, and what was happening at the time when the RMBS group was downgrading subprime bonds that existed within CDOs that had been raided by the CDO group. Maybe, explain a little bit of the internal organizational structure and dynamics and how that played out during 07 when that was most relevant.

Kolchinsky: Sure. That is a great question. At least for Moody's, most of us on the CDO side had very little understanding of how RMBS worked mechanically. That was part of the problem with the whole approach, thinking of them just as another type of corporate bonds. Part of that is because most people who came into the CDO group were ex-corporate bond people. The thought was that defaults with recoveries, not as a Pay-as-you-go type approach how RMBS really worked. I became an expert because I had to when I was running this group.

I needed to educate my team about how these things actually work, in reality the BBB subprime bond, if it had a default, would not recover 45%. The probability of that happening in reality, that it is about $5,000,000 and thin and any real losses would blow right through it. But they were just binary options, that probability was very high. There was a lack of knowledge about how these bonds actually worked, and lack of communication. We were in the same groups. For whatever reason, we knew them, we nodded to them, we did not really talk to them that much at all.

Even though, there was a huge amount of business that we are... We assume that ratings are ratings, and everything performed like a corporate bond, which it obviously does not. Especially on the recovery. Remember we used expected loss ratings, it is more than just default probability. The recovery was very important. Most mezzanine securities were basically options, binary options. They would either get paid or not paid. It is a question of timing.

YPFS (SK): The underlying, the RMBS ratings also used an expected loss approach, right?

Kolchinsky: They theoretically did ... Well, yes and no. I think they said they did but in reality, they did not. For us, the expected loss approach where we take a bond, we would compare how much principal discount or principal paid back compared to its notional, and that was the expected loss. I think like most RMBS, the way that the RMBS team rated their bonds was on a dollar loss. They would create a capital structure. What defaults it could tolerate at different levels. For better or for worse, and as I said, I am not a huge fan of sophisticated models, like I said with the binomial. But their models basically were capital structure models, you generated what the expected loss...

In this case I am talking about, not the probability weighted expected, but the single scenario expected loss on a pool of assets. So, if the pool was expected to lose 6%, that was the single B level subordination, and then you added multiples on that expected, on to the hit to the AAA. That was basically the whole

model. And again, as you know, in CDOs we took the excess spread very seriously, and the waterfall very seriously. It was modeled in a very detailed manner.

YPFS (SK): Let us drill into that event where there was the huge mass downgrading of RMBS bonds.

Kolchinsky: Yes. That was the event... This is right around, at least September of 2007, and I still had a sprinkling of deals in the pipeline. These were real money deals, but I think some bankers wanted to price and push it off to a potentially a monoline. But still, we were rating some deals. I just a chance encounter with the head of RMBS surveillance group, and like I said, 10:00 p.m. I went down to his office. He had spreadsheets about how he was going to downgrade. They were working on a mass downgrade. I went up to talk to my boss and said, "We can't rate deals. We are about to blow up the market. I can't put a rating on something knowing that I know these ratings are wrong." There is that intermediate process of a mass downgrade, which probably what cost me my job. I was going to be fired, but Gus Harris who is my mentor had a position, a lower position in Moody's Analytics. He brought me over there. That was the beginning of the end for me at least.

YPFS (ML): About rating agency reform, Eric. Following on your comment earlier about the basic incentives of the ratings agencies and how it grew the problem of issue or pay model and the whole business of pricing and ratings. What changed? Wasn't it always this way that the ratings...? Moody's has been around for 90 years. This problem was there before.

Kolchinsky: Yeah. It was probably there but structured finance changed. If I find this presentation, I will send it to you. Structured finance challenged the duopoly. When you are in duopoly, Moody's would not care because you had to come to Moody's. They were a utility business, they would clip coupons, create bonds. They did not have incentive to increase market share, because they could not. And they were not afraid of losing market share, because they could not. I heard stories from people on the corporate side of deliberately making the CEO wait 15 minutes in an office just to put them in their place, so they know who they are. These little games - structured finance changed all that.

First you had some of the second tier rating agencies - at that point, that would be Fitch, which being able to actually - there was no history, or at least market domination, so people started going to Fitch for ratings much more openly, so now you had competition. You still had that whole idea of, "We just need two rating agencies," but now you have three in play. It was a new market. Second, you had many people in corporate credit analysis business. A lot of people do that. It is a similar process to that for equity. Spreading balance sheets, that's old hat for a lot of people. In that market you cannot say something is a single A or the credit quality, it was common knowledge in the market. All you were doing is you are applying a standard approach to it that could be classified.

With structured, there was very few people who could do that, and those people are concentrated at banks and rating agencies. You had a lot less transparency because not a lot of people knew what was going on. Each market was very specific. People in CDOs did not know what was happening in RMBS, it had its own little twists and turns. You had a lot of specialized knowledge. You did not have that history of corporate, so there was not a lot of outside checks. People still sort of assumed kind of like the corporate bonds and that they would not work the same. That was one.

Third, Moody's went public, 2001. Earnings started to matter, before that it was peddling along. Fourth, rates stayed down, stayed low. That was a big thing. Maybe I am being snarky, but one way you could lower all of this speculation is, increase the ten-year to 7%. When the pension funds can start earning a real return on real risk, they are not going to need a lot of this stuff. It was a lot of these things that changed.

YPFS (ML): There's a lot of factors at once. The economics that you described were fueled by the change in the structured finance growth by the low rate environment. The derivatives, obviously you have spoken to that. Do you see any short plug today for making that case you have made before publicly, for the quasi-public function of a ratings agency?

Kolchinsky I think it is the best approach. That is what I really do now. Again, I want to remind you, I am not speaking for the NAIC, just me personally. NAIC has always had, it is effectively a publicly owned ratings shop, or at least a regulatory function of the rating agency in various forms. It has had the SVO [the Security Valuations Office] for a long time and SVO has analyzed corporate credit for decades. One of the reasons I think they brought me in to do structured analysis. There was no magic behind the credit analysis at the NAIC. There is a team of us that does it.

The way I talk about it in my normal presentations anyway, we have got three business models for credit at the NAIC. We have a completely in-house one, that is the SVO, the Security Valuations Office. We do credit analysis and assign designations, which are only to be used for the insurance regulatory space. Second, we have a fully outsourced model, and that is the rating agencies; we have no control over them. And (third) we have the model that I run, which is the hybrid model, that we outsource, but we outsource under a contract. And the contracted party owes us certain duties in terms of their deliverables. And I oversee it because I report to the regulators. And if I mess up on a regulatory demand-- my incentives are to make sure that insurance companies are safe to the extent that regulators want them to be safe when they're in their safety window-- if the regulators are pissed off, I'm fired.

My incentives are at least, I am not aligned to grow the market or to make it better, I am a salaried employee, there is no bonus. There are no stock options. That is a better approach. The problem is a lack of - low rates ... One of the things I said in one of my testimonies is, "If you add more competition and rating agencies, that is not the answer. Because you can have more rating

agencies competing for a smaller pie", and that's in fact what has happened. I do not think Moody's is that bad now, but you have many others.

YPFS (SK): Right. I think we got to wrap up in a couple minutes here.

Kolchinsky: I am happy to do this again, maybe in the new year if you want. And we can talk about some of these things. I do not know if that is something that you would want to do or not, but as you can see, I am full of opinions and other stuff as well.

YPFS (SK): We've covered actually most of what we wanted to get. I could definitely imagine after we have conducted a handful more interviews and synthesized some of the themes, it might be really nice to do a short follow-up and ask some of those questions. That would probably be, not in January, but more like February-ish. But we can talk about that. If you ever find that "Lessons learned," presentation it would be great to see it.

Kolchinsky: I have it. It is in my gigs and gigs of stuff. I have seen it this year. just have to find it again.

YPFS (SK): That would be great. Super.

YPFS (ML): Yeah, that would be great.

Kolchinsky I will send it to you soon.

YPFS (ML): OK. Lastly Eric, is there anyone you would recommend we talk to base on our interest today and the questions we have asked you. Any references you would suggest that you have not shared already with Steve?

Kolchinsky Reach out to Gus, he might be interested.

YPFS (SK): Yeah. OK. What was Gus's position during that 2005 to 08 time period?

Kolchinsky He was the head of the whole CDO group. But then he was pushed out and he went into... This was internal political things; I do not think this had anything to do with quality of products. But he lost a small internal battle, and he had a different mentor who put him into Moody's Analytics. That was Brian Clarkson. He was, during this time was the big boss of CDOs, all of them, cash, synthetic. He was replaced by Ingrid, in '06 or '07? '06.

YPFS (ML): Great, well, Steve unless you have anything more-

YPFS (SK): Yes, I think that is great. Thank you again we really appreciate it.

Kolchinsky Sure, no problem.

YPFS (ML): Nice to see you, hopefully we can do this in person someday.

YPFS (SK): Yes, nice to see you too. Yeah that would be great.

Suggested Citation Form: Kolchinsky, Eric, 2020. "Lessons Learned Interview." Interview by Steve Kasoff and Matt Lieber. Yale Program on Financial Stability Lessons Learned Oral History Project. December 22, 2020. Transcript. https://ypfs.som.yale.edu/library/ypfs-lesson-learned-oral-history-project-interview-eric-kolchinsky