Efraim Benmelech began with a response to the discussants. He referred to a previous paper with Jennifer Dlugosz, “The Alchemy of CDO Credit Ratings,” in which they discuss the mismatch of actual security ratings with models of ratings. In particular, he highlighted that the standard rating models predict a much higher proportion of AA+-rated securities than are actually seen in the data. One explanation he mentioned is that there might be a higher demand for AAA because of regulations. Benmelech agreed with Bengt Holmstrom that the rating agencies did seem to advise insurers on how to issue a rating of choice. He did not agree with Adam Ashcraft that the selection issues in the paper are a problem; since their data cover 530 of the 700 ABS (asset-backed securities) CDOs (collateralized debt obligations) that were issued, he does not believe that those missing would be from a drastically different sample.

Chris Carroll brought up a general topic of discussion. He claimed that one of the most persuasive stories describing the unfolding of the current crisis was described by the journalist Mike Lewis in an article in Portfolio magazine (December 2008). He agreed with Lewis’s analysis that the root of the crisis is the moment at which the investment banks decided to change from being partnerships into being publicly traded corporations in which incentives for long-term growth were misaligned. He wondered whether there was a similar transformation among the rating agencies.

Marios Angeletos noted that the authors had tested only whether tranches that had been rated by one agency were more likely to be downgraded than those which had been rated by multiple agencies. He urged them to also look at the difference in the likelihood of upgrades between these two groups; if this were also significant, it might suggest a problem in the rate shopping assumption. Daron Acemoglu further wondered whether the one-rating regression was the correct one to determine the effects of rate shopping. He could imagine, for example, a situation in
which those tranches rated by multiple agencies were rate shopped by using negotiations in which competition among agencies was a threat. He was not convinced that the number of ratings was an accurate proxy for those tranches in which rate shopping had occurred.

Bengt Holmstrom discussed a paper by Gary Gorton (“The Panic of 2007”). In particular, he highlighted that Gorton had pointed out that it was the 2006–7 tranches that were the problem, not the earlier tranches. Holmstrom stressed that increasing house prices enabled subprime borrowers to get mortgages because of the potential of refinancing a few years in the future. This worked in the earlier tranches and continued to work until the house prices began to decline. He felt that this was an issue that deserved more work. John Geanakoplos later pointed out that there had been price declines before in localized areas. Detroit is one example in which there were big price declines. He stressed that the key fact is that a local price decline induces quite different behavior than an overall price decline. When the system was working, as Holmstrom had pointed out, many of the subprime borrowers refinanced after a few years of paying off their debt. The real surprise in this crisis came when they could no longer refinance. This happened not only because house prices declined (which was not a surprise) but because the conditions of the banks changed; the banks changed their lending rules and demanded more collateral. Geanakoplos claimed that when prices declined in a local area, the banks did not change their practices of lending as they did in a systematic crisis.

Chris Mayer had two comments. He first stressed that it is important to understand how the market responded to rating information. For example, the reason that some tranches got multiple ratings could be that the holders may have had the view that having multiple ratings is priced into the market in some way. He believed that in order to understand what happened with the ratings in the crisis, it is essential to try to disentangle how the market priced different actions relating to ratings and rating agencies. His second related comment was about the adverse selection aspect of CDOs. Because of asymmetric information, the tranches may have been set up in such a way as to just barely get the AAA rating. They still could have produced good prices because of the fact that many models used in the financial world considered securities of one rating to be the same, no matter what the other observable characteristics of the security were. He posited that this may be an interpretation of how the crisis unfolded.

Ken Rogoff pointed out that it seemed to be the case that the extra risk in some of the AAA assets actually was priced; since not all of the AAA
assets were priced the same, the differences in prices reflected differences in risk. He also brought up the issue that only 20% of the bond market is rated. He wondered what kind of informational problems this presented for the rest of the market and thought this was a fruitful topic to explore further.

Jennifer Dlugosz responded to a couple of the comments. She first agreed with Angeletos that it would be useful to look at the upgrades of one-rating tranches as well as the downgrades. She also agreed with Acemoglu that there could be a world in which rate shopping would involve more than one rater; however, she made a plea for the limitations of what they were able to do with the data.

Benmelech made the final comments. He wanted to stress that he did not intend to argue that the market for securitization will disappear. Rather, because he believed that the ABS CDOs could follow a cycle of boom and bust just as other securities have done, it is possible that in the near future there would be fewer ABS CDOs. He pointed out that the market for securitization has two stages: the pooling of assets (diversification) and the tranching. If increased regulation of rating agencies hinders their ability to distinguish between tranches, he claimed that it is possible that some of the securities would disappear. Finally, in response to Rogoff’s comment about pricing, he mentioned a paper, “Economic Catastrophe Bonds,” by Joshua Coval, Jakub Jurek, and Erik Stafford (forthcoming in the American Economic Review). This paper points out that, generally, ratings are based on expected returns only rather than state-weighted expected returns. Therefore, because many investors use ratings alone as a measure of riskiness, there is indeed a mispricing of rated assets. In particular, the nonequity tranches of securities often only default in times of severe economic stress; thus, their expected return will overstate the price.