Testimony of Murray Barnes
Before the Financial Crisis Inquiry Commission
April 7, 2010

Chairman Angelides, Vice-Chairman Thomas, and Members of the Commission: Thank you for the opportunity to appear today. My name is Murray Barnes, and I served as a Managing Director in the Independent Market Risk Management Group of Citi's investment bank with responsibility for overseeing Citi's Global Credit Markets trading businesses from 2005 until early this year.

The Commission has asked me to address risk management issues related to collateralized debt obligations ("CDOs") backed primarily by subprime residential mortgage-backed securities ("RMBS"), including the setting of risk limits for these products, and valuation and pricing issues.

Generally speaking, the role of Independent Market Risk Management is to work with the business to limit and manage market risks that trading businesses are exposed to in a manner that is consistent with the Company's risk appetite. In my role, I reported directly to the head of Market Risk Management for the investment bank, who in turn reported directly and exclusively to Citi's Chief Risk Officer. This reporting line was fully independent of the business. This meant that, among other things, compensation for independent risk managers was not determined by the business, nor was it tied to the performance of the businesses that we covered. During the relevant period, I had a team of approximately twelve direct reports who were responsible for evaluating the various market risks across the various businesses within Global Credit Markets, including the CDO desk.

One of the primary risk management tools that we employed—with respect to CDO activities and all other trading functions—involved the setting of risk limits. Market Risk set risk limits on overall trading activity and, in the case of the CDO business, the warehousing of assets ahead of a planned CDO underwriting. Market Risk monitored compliance with those limits, and reviewed requests for changes in risk limits. Market Risk generally established limits based on the specific goals of a business and evaluated those decisions as the business developed and matured. The CDO business specifically had several applicable limits, including limits that applied to the assets the desk warehoused for future securitizations and limits that applied to any positions the desk retained from past securitizations, including the super seniors. Prior to the unprecedented market events of 2007, Market Risk set a notional limit on the super-senior positions. That limit included exposures to super-senior positions retained through the liquidity put program that has been described by Mr. Dominguez.

Each business, including the CDO business, was responsible for remaining within its applicable risk limits. As part of this process, Market Risk independently monitored compliance with risk limits. In addition, Market Risk continually monitored businesses and associated risk limits in light of market developments. Market Risk limits were formally reviewed annually but also were monitored daily. Specifically, Market Risk generated daily risk reports and provided weekly commentary concerning risk issues to senior business and Risk management. The businesses could request changes to limits at any time, and Market Risk typically responded to those requests by either approving the limit increase, subject to certain conditions and predefined approval authorities, or denying the increase, with an explanation.

During my tenure, Market Risk assessed potential exposures in a variety of ways, including through the use of stress tests, which employed assumptions using historical data to stress for potential loss. Stress tests were performed at the division level, desk level, and for individual market factors, in an effort to dimension risk in as many ways as possible. As part of this process, we routinely engaged in a dialogue with the business concerning the proper stress levels to employ, although the stress levels ultimately applied were the responsibility of Market Risk Management.

In accordance with Citigroup's pricing policies, responsibility for marking trading positions resided with each business, including the CDO desk. Market Risk does not verify the validity of trader marks; rather, that function is performed by members of the Financial Control group. Prior to the market events in late 2007, Citigroup relied on using comparable analysis to value its CDO super-senior exposures. It did this by comparing the spreads on similarly AAA-rated, first-pay tranches that had recently priced. This resulted in such exposures generally being carried at par (or cost) through June 30, 2007. These marks reflected the widely held belief—both within the Company and throughout the market—that the super-senior positions bore almost no risk of loss. As the unprecedented market events unfolded in 2007, and new issuance of CDOs froze, the business developed a model to price its super-senior positions based, in part, on an intrinsic cash-flow methodology of the CDO's underlying RMBS collateral. Over the course of the fourth quarter of 2007, and in the following quarters, that methodology was refined and inputs used to estimate the fair value of the super-senior positions were modified to reflect ongoing market developments. The valuation model and all relevant inputs were developed and appropriately vetted by the business, Market Risk, Model Validation Group, Financial Control (including product control and the quantitative Pricing group that assisted with complex pricing issues), as well as Citi's internal and external auditors.

I understand, with the benefit of hindsight, why one might conclude that Citi's Independent Market Risk Management failed to set appropriate limits on the CDO business. The issues, however, are significantly more complex. Indeed, given the widely held view that the super-senior positions posed only an extremely remote risk of loss prior to the unprecedented events of 2007, it is still difficult to imagine how the severity of the decline in house prices – and its effect on the CDO market – could have been predicted, let alone modeled.

Throughout the challenging market conditions of late 2007 and beyond, I believe that Citi's Independent Risk Management function was fully engaged with the business and had access to and utilized the risk management tools that were then available. Our downside risk assessments included what we then understood to be extreme loss scenarios, and Market Risk set limits for the businesses on the basis of that analysis. With the benefit of hindsight, we realize that certain stress loss assumptions were not adequate. Ultimately, I believe that the rapid growth of complex structured credit products presented unique challenges that, in some respects, outpaced the market's ability to develop the necessary tools to fully evaluate the risks of those products. The impact of this increasing complexity was exacerbated by the commonly held belief that housing prices could not fall by anything like the 30%-plus decline we have now experienced. Thank you for your time and I look forward to answering your questions.

# # # # #