



Yale SCHOOL OF MANAGEMENT  
*Program on Financial Stability*

EliScholar – A Digital Platform for  
Scholarly Publishing at Yale

---

YPFS Resource Library

---

7-13-2010

## Redacted- Office of Thrift Supervision's Targeted Review of AIG Financial Products ,Corp

United States: Department of the Treasury: Office of Thrift Supervision

<https://elischolar.library.yale.edu/ypfs-documents/5780>

---

This resource is brought to you for free and open access by the Yale Program on Financial Stability and [EliScholar](#), a digital platform for scholarly publishing provided by Yale University Library. For more information, please contact [ypfs@yale.edu](mailto:ypfs@yale.edu).



**Office Of Thrift Supervision  
Department of the Treasury**

---

Complex and International Organizations • (202) 906-6000 • Fax: (202) 898-0230  
1700 G Street NW, Washington, DC 20552

**TARGETED REVIEW**

**American International Group, Inc.  
New York, NY**

**Docket Number:** H2984

**Subject:** AIG Financial Products, Corp.

**Examination Start Date:** April 23, 2007

**Examination Completion Date:** July 13, 2007

**Examiner-in-Charge:** [REDACTED]

**INTRODUCTION**

This report outlines OTS's observations and conclusions resulting from its targeted review of certain critical aspects of AIG Financial Products Corp.'s (AIG-FP's or the firm's) risk management program. AIG-FP is a \$119 billion, wholly-owned subsidiary of American International Group, Inc. (AIG or parent company), operating within the parent company's Financial Services Division (FSD).

AIG-FP engages in standard and customized transactions involving commodities, credit, currencies, energy, equities, and interest rates with corporations, financial institutions, governments, agencies, institutional investors, and high-net-worth individuals throughout the world. The customized transactions typically take the form of over the counter derivatives and structured products (a range of complex securities, loans, and borrowings that are frequently large and contain embedded derivatives). In addition, AIG-FP enters into exchange-traded derivatives and invests in non-structured securities (AIG-FP calls both structured and non-structured securities/loans/financings "investment portfolio assets"), private equity deals, and trading positions. AIG-FP also provides credit protection and other various forms of guarantees. AIG-FP raises funds primarily through collateralized and uncollateralized guaranteed investment contracts, and the issuance of notes and bonds, some of which also contain embedded derivatives.

## **SCOPE**

OTS conducted this targeted review to assess the design and execution of the market risk and credit risk management programs at the business line level, and the manner and extent to which the parent company's risk management framework accounts for those risks. The review included evaluations of board and senior management oversight; policies and procedures; risk measurement, monitoring, and reporting; and the firm's supplemental risk management programs for its super senior credit default swaps and the London City Airport, private equity investment.

This review did not focus on operational, accounting, treasury, legal, compliance, or reputation risk. It also did not include a review of the capital, organizational structure, or earnings of AIG-FP. OTS will address certain of these matters as part of the concurrent, June 11, 2007 examination of the parent company.

## **SUMMARY OF FINDINGS AND CONCLUSIONS**

AIG-FP has adequately designed its credit and market risk management programs to match its activities, and risk management personnel adequately execute them. However, OTS recommends enhancing potential future exposure measurement and credit exposure exception reporting. The review of super senior credit default swaps and the private equity investment in the London City Airport did not disclose and specific concerns. OTS will conduct a more in-depth review of sub-prime exposure, including sub-prime exposure within AIG-FP's super senior credit default swap portfolio, during a targeted review in 2008.

## **RISK OVERVIEW, MANAGEMENT PRACTICES, AND PROCEDURES**

### **Credit Risk –**

Overview - The level of credit risk inherent in AIG-FP's operations is moderate. This risk is moderate because:

- (1) The majority of AIG-FP's derivatives and investment portfolio transactions are with highly rated entities or special purpose entities set up in connection with the issuance of asset-backed securities on a fully collateralized basis.
- (2) AIG-FP utilizes credit enhancements, including letters of credit, guarantees, collateral, credit triggers, credit derivatives, and margin agreements to reduce the credit risk of its financial derivative transactions (and sometimes asset positions). The use of these enhancements is common with derivatives dealers and governed by standard industry documentation.
- (3) AIG-FP has never incurred a credit loss in its derivatives portfolio and has experienced only one major credit loss on its asset portfolio (in 1993).

- (4) AIG has a highly structured credit governance program and a well defined hierarchy of credit and program authorities, limits, and responsibilities. These standards limit AIG-FP's credit exposure.

However, the growing complexity, diversity, and volume of the derivatives and structured products markets pose increasing challenges to managing credit risk.

Management Practices and Procedures – AIG-FP adequately mitigates and manages credit exposure through well-defined and detailed credit risk policies and controls and adequate credit risk measurement, monitoring, and reporting processes that are all consistent with the nature and complexity of its activities. OTS recommends enhancing potential future exposure measurement and credit exposure exception-based reporting, which management can correct in the normal course of business. AIG-FP has its own credit risk management group (CRMG) that is responsible for the administration of the firm's credit risk measurement, monitoring, and control functions. This group is independent from AIG-FP's transactional and position-taking functions. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Senior Management Oversight – AIG has established an adequate market risk management program at the corporate level to help manage market risk at AIG-FP. AIG’s Board of Directors has delegated market risk management responsibility to AIG’s Financial Risk Committee (FRC) and AIG’s Market Risk Management Department (MRMD). In this capacity, AIG’s FRC has approved a Market Risk Policies Manual for AIG-FP and AIG’s MRMD oversees AIG-FP’s MRMG. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The board of AIG-FP and the senior management of AIG and AIG-FP provide adequate oversight and make sufficient resources available to adequately evaluate and manage market risk at AIG-FP.

**Super Senior Credit Default Swaps –**

Overview - AIG-FP enters into credit derivative transactions in the ordinary course of its business, as both a seller and a buyer of credit protection. The majority of its credit derivatives require AIG-FP to provide credit protection on a designated portfolio of loans or debt securities. AIG-FP provides such credit protection on a “second loss” basis, under which AIG-FP’s payment obligations arise only after credit losses in the designated portfolio exceed a specified threshold amount or level of “first losses.” Under the majority of these “second loss” credit derivatives, AIG-FP provides credit protection on the layer of credit risk senior to the risk layer rated AAA by the credit rating agencies. In unrated transactions, AIG-FP provides credit protection that is equivalent to the layer of credit risk senior to AAA based on the same risk criteria used by AIG-FP for setting the threshold level for its payment obligations. The super senior credit default swap program has grown substantially in recent years. At March 31, 2006, the notional amount of net exposure was \$360.9 billion. At March 31, 2007, the notional amount of net exposure was \$467.4 billion.

The level of risk inherent in AIG-FP’s super senior credit default swaps is low due to portfolio diversification and the firm’s low risk tolerance.

[REDACTED]

[REDACTED]

Management Practices and Procedures - AIG-FP has established adequate supplemental procedures for managing risk in its super senior credit default swaps. AIG-FP’s CRMG, asset group, and legal group review all transactions. AIG-FP personnel have prepared procedural detail and worst-case VaR model explanations, recognizing that the firm’s main risk management data system does not capture the potentially significant risks in this product. Specifically, the market risk measurement system calculates zero risk sensitivity because the risk of loss, given current and historical market data, is statistically infinitesimal. Similarly, the credit risk measurement system calculates zero risk exposure because, with the risk of loss being statistically infinitesimal, there is no current counterparty exposure or potential future exposure. AIG-FP’s procedures require the underwriting of

each super senior credit default swap transaction such that AIG-FP's attachment point is equal to the maximum loss that the referenced portfolio will experience with a 99.85 percent confidence, based on simulation with worst-case data. AIG-FP calls the maximum loss the "super-senior attachment point."

The criterion AIG-FP uses for simulation with worst-case data is more conservative than the described credit rating agency criteria. AIG-FP's modeling simulates periods of extended recessionary environments (i.e. the worst credit rating transition matrices) and further stresses the data to incorporate specific risks that warrant concern (i.e., downgrading underlying collateral, lowering recovery rates, etc.). AIG and AIG-FP's CRMG reviews and approves written summaries describing the transaction and the modeling of each transaction. AIG-FP models all transactions monthly based on updated data. The monthly modeling includes stress testing for sensitivity to concentrations in individual names and industries. Previous stress tests include the insurance industry, the transportation industry, General Motors, Delphi, and sub-prime mortgages. AIG-FP reports summaries of the regular and stress testing modeling results to AIG quarterly.

AIG-FP has exposure to sub-prime mortgages via highly rated collateralized debt obligations (CDOs) where it has written credit protection through super senior credit default swaps. AIG-FP estimates that the amount of its net exposure in super senior positions is \$25.2 billion and that 32.7 percent of the exposure is mezzanine rated (where the mortgage securities underlying the CDOs are rated BBB or below). The firm indicates that it ceased writing super senior protection on transactions with sub-prime exposure beginning in December 2005, although some approved transactions did not close until 2006, and some additional transactions allow for substitution of collateral, resulting in a modest exposure to 2006 and 2007 vintage sub-prime mortgages. In addition, AIG-FP stressed the underlying instruments due to the heightened risks it perceived when initially analyzing the transactions (downgrading underlying collateral, lowering recovery rates, etc.). As with super senior credit default swaps where there is no sub-prime mortgage exposure, AIG-FP's simulation with worst-case data indicates that the likelihood of loss is remote.

Despite analysis that indicates loss exposure is remote, the recent downturn in the subprime mortgage market may result in rated CDOs and underlying mortgage securities with sub-prime exposure not performing as similarly rated instruments have performed historically. OTS will conduct an in-depth review of sub-prime exposure, including sub-prime exposure within AIG-FP's super senior credit default swap portfolio, as part of a targeted review in 2008.

Senior Management Oversight – AIG has established an adequate risk management program at the corporate level to help manage risk in AIG-FP's super senior credit derivatives business. While AIG has delegated much of the procedural management to AIG-FP, AIG has retained certain oversight responsibilities. [REDACTED]