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: James T. Christner

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. AIG-FP's CRMG is responsible for:

(1) Assessing the creditworthiness of, and assigning credit ratings to, all derivatives counterparties before the initial transaction and annually thereafter;
(2) Assessing the credit quality of, and assigning credit ratings to, all investment portfolio assets in consultation and cooperation with the firm's asset group;
(3) Providing credit approval and submitting transactions to AIG for approval where required by policy;
(4) Monitoring counterparty, investment portfolio asset, and aggregated, firm-wide credit exposures;
(5) Overseeing compliance with approved credit policies and procedures;
(6) Estimating reserves for credit risk; and
(7) Keeping AIG informed.

AIG-FP's credit risk policies establish limits that are consistent with the parent company's credit risk standards. In addition, the firm's credit policies manual establishes a detailed structure of limits, guidelines, and other parameters used to govern risk-taking. The parameters focus on credit ratings and maturity limits, with additional approval requirements for financial instruments with long-term maturities and high estimates of potential future exposure. In practice, all large and significant transactions (derivatives and investment portfolio assets) require prior review and approval by AIG. The credit policies manual requires documentation of the quantitative and qualitative analysis supporting large and significant transaction approvals in transaction approval memorandums. Written procedures for evaluating credit risk in products not easily captured within the firm's main risk management data systems (e.g. super senior credit derivatives) supplement the manual.

Based on a review of a credit file sample, the credit analysis and transaction approval memorandums adequately support the firm's transaction approvals and credit ratings. Excluding the shortcoming in potential future exposure calculations, AIG-FP's credit risk measurements accurately identify the firm's credit risk. AIG-FP's credit exposure calculation systems are based on queries that extract data from the firm's internal databases. The CRMG uses this information to identify and report relevant summaries of replacement exposure and exposure net of collateral, grouped by credit rating and term to maturity. It also uses the information to identify all exposures to counterparties and investment portfolio assets rated below the top three credit ratings and equal to or greater than $150 million. AIG-FP's CRMG reports the firm's credit exposures monthly to AIG and AIG-FP senior management.

Additional support of AIG-FP's credit exposure management program is provided by regular transaction review committee and marketing meetings; weekly investment portfolio reviews by the firm's asset department; monthly discussions and reports of asset backed securities with early warning signs regarding potential future credit deterioration; quarterly reports of covenant reviews on investment portfolio transactions with special purpose entities set up in the connection with the issuance of asset-backed securities; and independent collateral monitoring of credit by the firm's operations group.

AIG and AIG-FP have recently enhanced the AIG-FP credit risk management program through the implementation of a new credit exposure aggregation system. The improved system considers legal netting and collateral, which allows AIG and AIG-FP to scrutinize large credit exposures that credit mitigation techniques do not control. However, the system does not provide reasonably accurate calculations of potential future exposure. This is a critical component of credit exposure for derivatives counterparties because the amount of the credit exposure can potentially increase substantially over the term of the derivate contract due to future changes in market conditions. The current calculation uses a static interest rate shock, irrespective of the underlying risk and expectations for future market conditions. AIG-FP's senior management and CRMG recognized this shortcoming and submitted a proposal to AIG, dated May 22, 2007, to address it. AIG-FP's CEO informed OTS on July 13, 2007, that AIG-FP's plans to address the potential future exposure issues has been delayed until 2008 to let the firm focus on other higher priority initiatives.

While credit exceptions are typically the result of approvals granted before a transaction occurs or the result of an increase in the net market value of transactions, AIG-FP does not prepare regular exception reports that identify, centralize, prioritize, and track credit policy exceptions and the reasons for the exceptions. Such reports can increase transparency and be useful for monitoring purposes. OTS communicated its recommendations with respect to potential future exposure and credit exceptions to AIG-FP during a July 13, 2007 meeting. OTS also encouraged continued enhancements so that credit risk management practices do not fall below applicable best practice standards as they evolve. Upon notifying AIG's Chief Risk Officer of this matter, AIG and OTS decided to schedule a meeting to identify a solution to address the exception reporting matter.

<u>Senior Management Oversight</u> – AIG has established a credit risk management program at the corporate level to help manage credit risk on a consolidated basis and at all of its business units. In this capacity, AIG's Credit Risk Committee (CRC) has approved a Credit Policies Manual for AIG-

FP and AIG's Credit Risk Management Department (CRMD) oversees AIG-FP's CRMG. CRC's and CRMD's significant oversight activities include:

(1) Reviewing and approving AIG-FP's credit risk management strategies, policies, and procedures annually;
(2) Managing credit authorities (i.e. credit limits) delegated to AIG-FP's credit officers;
(3) Reviewing and approving transactions and credit risk exposures in excess of the credit authorities delegated to AIG-FP's credit officers;
(4) Establishing methodologies for quantifying and reporting credit risk exposures, and monitoring the risk against the limits established by the CRC;
(5) Reviewing AIG-FP's credit risk exposure reports monthly, in addition to supplemental quarterly reports addressing potential credit risk in super senior credit default swaps;
(6) Reviewing detailed presentations of AIG-FP's credit risk exposure, credit risk mitigation activities, and credit risk management practices annually.

In addition to CRC and CRMD oversight, key AIG senior managers receive and review quarterly summary reports that address AIG-FP's credit risk exposure. These managers include Chairman and CEO Martin Sullivan, Chief Financial Officer Steve Bensinger, Chief Risk Officer Robert Lewis, Chief Credit Officer Kevin McGinn, Managing Director of Internal Audit Michael Roemer, AIG FSD Senior Vice President and Managing Director William Dooley, and AIG FSD Chief Financial Officer Elias Habayeb. Furthermore, the AIG-FP board of directors reviews the summary exposure reports quarterly. The AIG-FP board of directors consists of many of the same key AIG senior managers who receive and review the summary credit risk exposure reports. AIG has also established an independent, internal audit program for AIG-FP's activities and risk. The audit program requires frequent audits, including audits of credit policy compliance (2008), credit exposure aggregation (2006 and 2007), and collateral monitoring (2007).

The board of AIG-FP and the senior management of AIG and AIG-FP provide adequate oversight and, with the exception of the delayed plan to address the potential future exposure shortcoming, make sufficient resources available to adequately evaluate and control credit risk.

Market Risk –

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

(1) AIG-FP minimizes the financial market risks from its transactions with customers primarily by entering into offsetting derivatives transactions on a portfolio basis. AIG-FP maintains a balanced portfolio, with minimal to moderate direct exposure to changes in market conditions (i.e. moderate exposure exists only with respect to volatility).
(2) AIG-FP derives substantially all of its revenues by earning transaction fees and bid/offer spreads rather than from taking speculative positions on risk (i.e. unhedged market risk exposure).

Because AIG-FP substantially hedges, in an economic sense, the market risk arising from its transactions, market fluctuations, and volatility do not significantly expose or affect its revenues and operating income. Except with respect to positions that do not qualify for hedge accounting in accordance with Generally Accepted Accounting Principals, little of AIG-FP's revenue is the result of changes in market conditions.

(3) The firm's market risk exposure measures reflect that AIG-FP is not taking on significant market risk exposure. For example, the firm's consolidated Value-at Risk (VaR) was $4.0 million as of March 31, 2007, and its highest Value-at-Risk over the last twelve months was $6.3 million as of January 31, 2007.

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

Management Practices and Procedures - AIG-FP adequately mitigates and manages market risk exposure at the business line level through defined market risk policies and controls, and comprehensive market risk measurement, monitoring, and reporting processes that are all consistent with the nature and complexity of its activities. AIG-FP has an experienced independent market risk management group (MRMG) responsible for the design and administration of the firm's market risk measurement, monitoring, and control functions. MRMG consists of 11 individuals that report to the CRO of the firm, including two managing directors and excluding a specialized operational risk team that provides support to MRMG by performing many of the daily operational routines. Most have been with the firm for 10 or more years. This group is independent from AIG-FP's transactional and position-taking functions. AIG-FP's MRMG has adequate accountability and is responsible for:

(1) Controlling the market risk of AIG-FP's portfolios;
(2) Reviewing and approving the pricing, booking and hedging of new products;
(3) Reviewing and approving sensitive inputs/remarks (i.e. real-time market variables and assumptions which impact pricing and risk measurements);
(4) Estimating reserves for market risk; and
(5) Keeping AIG informed.

AIG-FP's market risk policies establish a global limit for the firm based on VaR, which is consistent with the parent company's overall market risk measurement. In addition, the firm's market risk policies manual further establishes a detailed structure of limits, guidelines and other parameters used to govern risk-taking based on risk sensitivity thresholds and calculations that are integrated into the firm's data systems. Written stress testing plans supplement the manual, including worst-case stress testing scenarios, and procedures for managing tail risk in products not easily captured within the firm's centralized risk management data systems (e.g. guaranteed asset protection products, super senior credit default swaps, and benefit responsive options).

AIG-FP supplements VaR with detailed position analysis (i.e. risk sensitivities), stress testing, and profit & loss explanation (i.e. the last of which relates to risk measurement validation). The risk sensitivities are appropriately granular measures of outright loss exposure due to market movements over time and secondary exposures due to the non-linear relationship between loss exposure and market movements attributed to options. AIG-FP's MRMG reviews and compares the risk sensitivities against the risk thresholds identified in the market risk policies manual. The sensitivity thresholds highlight not only the larger risk sensitivities, but also the risk sensitivities that are visible enough to warrant a dialog with the traders. An independent department within AIG-FP (the middle office group) further calculates, on a daily basis, the firm's profit and loss due to market variations distributed in the same manner as the firm's risk sensitivities. This analysis provides AIG-FP's MRMG, CEO, CRO, and CFO with valuable information to evaluate whether the firm's risk measurement systems are working properly. AIG-FP's MRMG reports summaries of the firm's daily profit and loss, VaR, and risk sensitivities to AIG and AIG-FP senior management daily.

AIG and AIG-FP continue to enhance the market risk management program, most recently through formalizing a $20.0 million VAR limit to govern risk taking at AIG-FP, improving exception-based reporting, and enhancing stress testing of market risks. The progress of these enhancements is adequate, and they align with industry best practices. OTS encourages continued enhancements so that market risk management practices continue to meet evolving best practice standards.

<u>Senior Management Oversight</u> – 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. Significant FRC and MRMD oversight activities include:

(1) Establishing and annually reviewing a VaR based market risk limit for AIG-FP, effective as of March 19, 2007.
(2) Establishing procedures and methodologies for reporting market risk exposures for use in assessing how the firm monitors and controls risk against FRC's established limits.
(3) Reviewing AIG-FP's market risk exposure reports daily.
(4) Maintaining an ongoing and active dialogue with AIG-FP's market risk management group via phone, email, teleconference, bi-weekly meetings, and site visits.

In addition to AIG's FRC and MRMD oversight, key AIG senior managers receive and review quarterly summary reports that address AIG-FP's market risk exposure. The AIG-FP board of directors reviews the summary exposure reports quarterly. These managers, and the board, are the same individuals who receive and review quarterly summary reports that address AIG-FP's credit risk exposure. AIG's independent, internal audit program for AIG-FP requires audits of market risk policy compliance (2008) and profit & loss reporting (continuous).

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. This characterization is qualified because there has been significant growth of the global credit derivatives market, and the systems designed to capture the risk in this market are untested during periods of extreme or extended volatility:

(1) AIG-FP has never experienced a super senior credit default swap loss;
(2) The historical total loss rate on the portfolios (inclusive of senior and junior positions) is well below the average size of the positions junior to AIG-FP’s attachment point at the super senior level.
(3) AIG-FP’s supplemental risk mitigation and management program for this product provides that the likelihood of any payment obligation by AIG-FP under each super senior transaction is remote, even in severe recessionary market scenarios.
(4) The super senior credit default swap portfolio, as of March 31, 2007, is diversified among 256 transactions, reflecting an average transaction size of $1.8 billion. The collateral supporting each transaction is diversified among numerous securities, loans, and other debt instruments. The issuers are also geographically diversified.

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.

<u>Senior Management Oversight</u> – 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. Significant AIG oversight activities include:

(1) Requiring that AIG-FP submit all super senior credit default swap transactions to AIG's CRC for review and approval;

(2) Requiring AIG-FP to formally review its super senior credit default swap portfolio with AIG's CRMD quarterly, including reports on the results of stress testing.

The strength of this control structure is evident by AIG's CRMD review of the July 2007 subprime exposure report. The report helped the corporate control unit aggregate and evaluate corporate wide the parent company's sub-prime exposure. The board of AIG-FP and the senior management of AIG and AIG-FP provide adequate oversight and sufficient resources for evaluating and controlling super senior credit default swap risk.

London City Airport Private Equity Investment

Overview – On November 29, 2006, AIG-FP made an equity investment of GBP 185 million in London City Airport (LCA). AIG-FP invested as a partner in a consortium of investors including a joint venture between General Electric Commercial Finance (GE) and Credit Suisse (CS).

The level of risk inherent in this investment is high because the firm does not have a long history of private equity ownership and because there are heightened risks involved in this type of investing.

Management Practices and Procedures - AIG-FP management conducted a thorough pre-purchase analysis of the LCA investment and adopted adequate risk controls. AIG-FP agreed that the airport purchase is different from its core group activities. However, management stressed that the investment is consistent with AIG-FP's overall financial asset investment strategy of seeking predictable cash flows, as well as its more narrow allocation of a certain percentage of its investments in infrastructure assets that also generate consistent and predictable cash flows. In addition, by partnering with two other major financial corporations with private equity investing experience and expertise, AIG-FP believes it has further strengthened its oversight capabilities.

AIG-FP prepared a written pre-purchase analysis that comprehensively described relevant details of the equity investment. The analysis included summaries of the proposed ownership group and management teams, existing contracts and facilities, regulatory requirements, corporate and private aviation markets, the London aviation market, and historical and projected profitability, among other factors. AIG-FP submitted a thorough executive summary of its pre-purchase analysis to AIG for its consideration and approval. Consistent with AIG-FP's desired asset investment strategy, the financial modeling reflects that the equity investment provides predictable cash flows that it can model (predictable air traffic, long-term airline contracts, long-term cost contracts, etc.). In addition to modeling expected results, AIG-FP and the consortium performed various additional stress tests to identify and measure the financial risks. These tests incorporated potential traffic, tariff, and capacity forecasts, as well as more significant environmental, geopolitical/pandemic, and market shock event scenarios.

In addition, AIG-FP, in cooperation with the other consortium members, has implemented adequate controls, processes, and plans to monitor and mitigate some of the heightened risks with owning an airport facility, such as facilities management, fraud, terrorism, and government intervention. The controls include reasonable operating procedures and precautions, ownership oversight with infrastructure investing experience, validation of profit center reports, an internal audit program that focuses on security, and experienced on-site management.

Senior Management Oversight – Key AIG senior managers received and reviewed a detailed executive summary of AIG-FP's pre-purchase analysis of the equity investment. They approved the transaction before AIG-FP made a commitment. AIG's internal audit group is currently performing an audit of AIG-FP's Private Equity/Infrastructure Investments.

Recommendations –

- ✓ AIG-FP should fast track its May 22, 2007 Proposal on Potential Future Exposure and, as addressed within the Proposal, incorporate credit risk into its stress testing. If management does not place higher priority on the proposal than other ongoing projects, AIG-FP should provide a written statement outlining its rationale.

- ✓ AIG-FP should design and implement an exception based reporting system for credit exceptions (similar to the recently implemented exception based reporting system for market risk sensitivities).