Export-Import Bank
***of the* United States**

Osvaldo L. Gratacós
Inspector General

September 28, 2012

David Sena
Senior Vice President & Chief Financial Officer
Export Import Bank
811 Vermont Avenue
Washington, DC 20571

Re: Review of Portfolio Risk Mitigation Techniques

Dear Mr. Sena:

In our report, "Portfolio Risk and Loss Reserve Allocation Policies" (OIG-INS-12-02), we cited several deficiencies with respect to Ex-Im Bank's current loss reserve allocation and portfolio risk management policies and procedures. In addition, we noted that Ex-Im Bank's current governance structure is not commensurate with the size, scope, and strategic ambitions of the institution.[1] This letter complements our earlier report in two respects. First, we summarize our discussions with a broad group of financial institutions on portfolio risk mitigation best practices. Second, we provide a brief overview of the risk management techniques used by these institutions to mitigate the inherent risks of their operations.

Although the risk management practices of the various agencies vary in accordance with their mandate and institutional constraints, most share a common point of departure — to identify and quantify the broad spectrum of risks inherent in the core business activities. Informed by this analysis, management can set prudent risk tolerance levels and select an appropriate mix of risk management techniques.

Overall, we believe Ex-Im Bank would benefit from a comprehensive assessment of both agency-wide risk factors and portfolio risk mitigation techniques. The results of this assessment would inform the design of a robust risk management framework that in our estimation is critical to Ex-Im Bank's long term ability to manage its growing portfolio. This initiative is particularly timely given the reauthorization of Ex-Im's Charter in May 2012, and the attendant increase in Ex-Im Bank's exposure cap to $140 billion by 2014.

Finally, our review of risk management best practices confirms the need for Ex-Im Bank management

[1] This report can be viewed at http://www.exim.gov/oig/audits.cfm.

to systematically address the diverse mix of qualitative and quantitative risk factors that confront Ex-Im Bank's portfolio as it fulfills its strategic mission. As of to date, we are pleased to see that Ex-Im Bank has commenced work on this area.

In writing this letter, we were mindful of Ex-Im Bank's statutory limitations as well as the guidance provided by Office of Management and Budget (OMB) and U.S. federal regulatory agencies. To this end, we contacted OMB. OMB's response to our questions has been attached as an appendix to this letter. Our intent is threefold: (i) to address shortcomings regarding Ex-Im Bank's loss reserve and risk mitigation practices; (ii) to highlight portfolio risk mitigation best practices; and (iii) to encourage Ex-Im Bank and OMB to reassess current practices in the hope of reaching a more comprehensive risk mitigation plan for Ex-Im Bank's $100-plus billion portfolio.

Background:

Financial institutions including Export Credit Agencies (ECAs) typically employ three primary strategies to mitigate financial risks. First, institutions avoid risk through due diligence, credit and legal analysis and credit structuring completed prior to closing the transaction. Second, they can reduce exposure to a specific obligor, industry or country through a loan syndication or asset sales. In addition, ECAs may co-finance a large transaction with other ECAs.[2] Third, institutions may use risk mitigation techniques to reduce portfolio risks once the transaction closes and becomes part of their portfolio.

Risk mitigation techniques should be congruent with an institution's mandate and internal constraints. For an ECA, a key consideration is its business model which may range from lender of last resort to quasi-market player to industrial policy institution. Moreover, the operational objectives, risk appetites, amount of government support, pricing and financial drivers associated with each of these models may differ. As a result, risk mitigation practices of an ECA will vary in accordance with its mandate.

Similarly, U.S. federal agencies are subject to different risk management guidelines arising from their respective charters, mandates, missions, and discussions with OMB. For example, the Overseas Private Insurance Corporation (OPIC) Charter states that the agency should "conduct its insurance operations with due regard to principles of risk management including efforts to share its insurance . . . and reinsurance risks" and specifically allows OPIC to "cede" its guarantees to a private insurance company.[3] The Risk Management Agency (RMA) of the Federal Crop Insurance Corporation of the U.S. Department of Agriculture (USDA) is empowered to provide both insurance and re-insurance for agricultural commodities grown in the U.S. Concerning the latter, RMA provides reinsurance for sixteen private crop insurers and shares potential loses with the reinsured private insurance companies. [4]

[2] In 2010, Ex-Im Bank completed 34 co-financing transactions totaling $6.5 billion. Approximately 98% of these transactions involved aircraft financing. See U.S. Export Import Bank Annual Report 2011.

[3] Overseas Private Investment Corporation Amendments Act of 1974, as amended, supra note 36.

[4] For more information, see http://www.usda.gov/documents/FEDERAL_CROP_INSURANCE.pdf.

Although Ex-Im Bank's Charter does not specifically endorse or authorize a particular risk mitigation strategy, support for the risk mitigation function derives from several sources:

- Broad banking authority: Section 2(a)(1) of the Export-Import Bank Act of 1945 (the Act) confers broad banking authority to Ex-Im. [5]
- Reasonable provisions for losses: The Act requires Ex-Im to make reasonable provisions for losses. OMB Circular A-11 also addresses this issue.
- The Federal Credit Reform Act (FCRA) of 1990: FCRA directs policies used for the allowance for loan and lease losses (ALLL) — originally referred to as the reserve for bad debts. ALLL is a valuation reserve established and maintained by charges against operating income. It is an estimate of uncollectible amounts used to reduce the book value of loans and leases to the amount that a bank expects to collect.
- OMB guidance: OMB Circular A-129 directs agencies to analyze and control the risk and costs of their programs and to benchmark against current market practices. [6]

Agency-wide Risk Assessment:

Notwithstanding the different approaches to risk mitigation, portfolio risk managers share a common point of departure — to identify and quantify the financial risks inherent in the core business activities. From our review and prior audit report, it does not appear that Ex-Im Bank has conducted an agency-wide risk assessment since the 2008 review conducted by Ex-Im Bank's Audit Committee. A sound risk management framework, including the adoption of frequent agency-wide risk assessments, adopts a holistic approach to risk, encompassing the risks across the entire agency. It redirects management's focus from divisional structures and silos to a more process-oriented view of risk management. It provides timely, independent, and accurate information on Ex-Im Bank's consolidated risk profile to senior management. In addition, as stated by Basel Committee on Banking Supervision, a risk management framework seeks to ensure additional objectives: [7]

- Sound risk assessment and mitigation are embedded into financial and non-financial management processes.
- There is a clear delineation of risk ownership within the institution.
- Financial governance arrangements are sufficiently robust and operating effectively.
- Financial reporting is accurate, appropriate and consistent with government accounting standards.
- The financial control framework is effective and adequately supported by an internal compliance culture.

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[5] Export Import Bank Act of 1945, 12 U.S.C. § 635 (2006).

[6] Office of Management and Budget (OMB) Circular No. A-129 (revised), Ch. IV (3) (d), Asset Resolutions (2000), available at http://www.whitehouse.gov/omb/circulars_a129rev.

[7] For more information see Basel Committee on Banking Supervision guidelines at http://www.bis.org/publ/bcbs195.pdf.

Agency-wide risk assessment was strongly promulgated by the Sarbanes-Oxley Act of 2002, for use in the private sector[8] and has become a best practice for risk management policy among both private and public institutions. Indeed, numerous organizations including foreign ECAs, multilateral financial institutions and certain U.S. federal agencies including the Small Business Administration and the Department of Energy are strengthening the risk oversight function to include an agency wide risk assessment.[9] In general terms, risk assessments typically include the following six core components:

Internal environment:	Assess the agency's risk management philosophy.
Objective setting:	Define business objectives including growth, profitability, leverage, solvency, credit losses, US policy goals, etc.
Identify and assess risks:	Define accounting and economic exposures, identify and quantify risks, probability distributions.
Risk response:	Establish agency wide risk tolerance levels.
Control activities:	Implement policies and controls to enforce risk levels.
Evaluate and measure:	Assess effectiveness, benchmark objectives against performance.

Credit Portfolio Best Practices:

Given the perceived lack of risk mitigation and portfolio risk management strategies at Ex-Im Bank and in an effort to learn more about risk management best practices in both the public and private sectors, OIG interviewed the senior management of the International Association of Credit Portfolio Managers (IACPM), and a broad group of foreign ECAs, U.S. federal agencies, and multi-lateral financial institutions. The results of our interviews and discussions are delineated below.

As an international association focused on promoting credit portfolio management best practices, IACPM compiles a list of best practices as observed by its eighty-seven (87) member institutions. Entitled, "Sound Practices in Credit Portfolio Management"[10] , IACPM cites the following "sound practices":

- Define the portfolio to be managed. Identify and aggregate all risks to be measured.

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[8] With the passage of the Sarbanes-Oxley Act of 2002, U.S. publicly-traded corporations were required to implement an enterprise wide control framework in their internal risk assessments. Many companies opted for the internal control framework designed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) with additional guidance provided by the Securities and Exchange Commission and Public Company Accounting Oversight Board in 2007.

[9] Based on interviews conducted with these institutions by the OIG in 2011 and 2012.

[10] This publication is available at http://www.iacpm.org/about-us/IACPM_Sound_Practices.pdf.

- Identify the role and mandate of the credit portfolio management (CPM) function. Clearly delineate roles and responsibilities of CPM management.
- CPM should be staffed with a combination of individuals who possess three core competencies: credit experience, quantitative analytics, and market/credit trading experience.
- Standardize risk measures and models.
- Commitment to data integrity.
- Understand economic value versus accounting value.
- Set limits and manage concentrations.
- Stress test the portfolio
- Align accounting conventions with portfolio management practices.
- Rebalance the portfolio to achieve strategic objectives.
- Utilize risk mitigation techniques consistent with overall strategy.
- Establish objectives and performance metrics.
- Be transparent in disclosures.

In addition to compiling a list of best practices as observed by its member institutions, IACPM conducted a survey of its member institutions and asked which techniques they used to mitigate portfolio risk. The survey results are summarized in Table One below. The survey reveals that managers typically use a combination of techniques. The use of portfolio discipline strategies such as sub-limits was the most frequently cited.

Table One: Techniques Used to Manage Credit Portfolio Risks by Importance

Portfolio Discipline (Sub-limits)	Credit Default Swaps	Loan sales	Transfer pricing	Portfolio Securitization	Financial Guarantees	Options	Credit Insurance
88%	70%	53%	37%	35%	26%	25%	19%

Source: IACPM study; 2011.

To complement the data obtained from IACPM, OIG also interviewed a broad group of twenty-five (25) institutions including foreign ECAs U.S. federal agencies, and multi-lateral financial institutions.[11] Table Two summarizes the results. As with the IACPM survey, the use of portfolio discipline on the front end was the most commonly cited technique.

[11] ECAs include Atradius (Netherlands), CESCE (Spain), COFACE (France), EGAP (Czech Republic), EKF (Denmark), EKN (Sweden), Euler Hermes (Germany), ECGD (UK), EDC (Canada), Finnverra (Finland), GIEK (Norway), MEHIB (Hungary), KUKE (Poland), OeKB (Austria), ONDD (Belgium), SACE (Italy), and US EXIM. Multilateral agencies include MIGA, IFC, and IDB. U.S. federal agencies include OPIC, DOE, USDA, MCC, and SBA.

Table Two: Techniques Used to Manage Credit Portfolio Risks by Importance

Portfolio Discipline (Sub-limits)	Reinsurance	Loan sales	Credit Default Swaps
84%	62.5%	41%	21%

Source: Sources include 2011 annual reports, interviews conducted in 2011 and 2012 by the U.S. Ex-Im Office of Inspector General, and data provided by the Berne Union Secretariat.

Together, the IACPM survey and OIG interviews give rise to several key observations:

- Risk mitigation practices typically reflect the particular characteristics of the organization, including portfolio composition, business model, access to capital, levels of government support, etc.
- Most institutions surveyed pro-actively address portfolio risk through a combination of techniques with portfolio discipline on the front end cited as the most often used in both the IACPM and OIG surveys.
- Institutions use stress case analysis in a systematic manner to help establish the need for risk mitigation and to mitigate unforeseen risks and market shocks at the portfolio level.
- Many agencies have created a distinct risk management function to monitor and implement risk mitigation strategies.

Risk Management Strategies:

The formulation of a risk mitigation strategy typically begins with an assessment of current risk management policy, agency objectives, and agency–wide risks. This initial assessment provides the basis to establish portfolio discipline by setting prudent risk tolerances or portfolio sub-limits for the identified risks. The next step is to review various risk mitigation techniques, perform a cost benefit analysis, and select appropriate techniques that are consistent with the agency's risk appetite and charter. Finally, a risk manager will need to create a dynamic risk reporting system or "dashboard" that informs senior management on its consolidated risk position. Risk management strategies are not static, however, and need to be reviewed against changing market conditions. As far as we can discern, other than the OMB's mandated re-estimate process, the above steps are not currently performed at Ex-Im Bank.

While a detailed review of risk mitigation techniques lies outside the scope of this letter, it is nonetheless instructional to review some of the risk mitigation techniques that may be available to Ex-Im Bank including portfolio concentration limits, reinsurance, asset sales, and credit default swaps. For illustrative purposes, we provide a brief description of these techniques. It is important to note that we do not specifically endorse any product or technique, nor do we express an opinion as to OMB's views on a particular risk mitigation strategy. Our principal intent is to bring to Ex Im's attention current best practices related to portfolio risk mitigation and to encourage Ex-Im and OMB to reassess current practices in hopes of reaching a more comprehensive risk mitigation plan.

Portfolio discipline: "Soft" or "hard" portfolio concentration sub-limits can inform future pricing, risk management decisions and business development strategies. As indicated above, portfolio discipline strategies rank among the most popular risk mitigation strategies with 88% of IACPM survey respondents confirming that they implement sub limits. Similarly, 84% of the OIG survey respondents responded affirmatively to the use of "soft" or "hard" portfolio credit limits.

Imposing "soft" portfolio sub-limits or "thresholds" would allow Ex-Im to systematically identify and manage its credit exposure thresholds and have the appropriate discussions between the relevant business units to determine how to appropriately balance the portfolio. Moreover, "soft" sub-limits would inform management on the pricing and reserving for incremental portfolio concentration risk. For example, although aircraft transactions represent almost 51% of the total dollar out-standings of Ex-Im Bank's balance sheet, each new airline transaction is structured and priced using the same criteria and minimum pricing guidelines as any other aircraft transaction without taking into account the incremental portfolio risk in its pricing criteria.

As noted in our prior report,[12] what we are advocating for is not a mechanism to turn transactions away or to stop financing transactions involving concentration risk exposure, nor are we advocating such conduct. To the contrary, the intent is to allow Ex-Im Bank management to be more proactive in its risk management responsibilities and to identify opportunities to diversify its portfolio by emphasizing under represented sectors and countries consistent with Ex-Im Bank's Strategic Plan

Asset sales: Asset sales are a cost-effective mechanism to transfer risk from the original credit provider to a second financial institution. In essence, the selling institution sells a portion of its original loan or guarantee commitment on a non-recourse basis to another lender. This is typically done via an assignment agreement. The original commitment of the selling institution is then reduced by an equal amount and loss reserves are no longer required for the portion that was sold to the purchasing institution. This is a widely used strategy by institutions. For example, fifty three percent of IACPM survey respondents answered that they use asset sales to reduce risk exposures while 41% of OIG survey participants answered affirmatively.

In fact, OMB may have provided guidance on this matter. OMB Circular A-11 applies to all programs that provide direct loans or loan guarantees to non-federal entities that are subject to the Federal Credit Reform Act (FCRA). Section 185.8 of OMB Circular A-11 provides that "agencies are . . . encouraged to explore selling performing loan assets to the extent that such sales would benefit the Government."[13] Moreover, OMB Circular A-129 states that "agencies conducting such . . . loan asset sales programs will consult with both OMB and Treasury throughout the prepayment and loan asset sales processes to ensure consistency with the agreed upon policies and guidelines."[14] Thus, to the extent that the Ex-Im

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[12] This report can be viewed at http://www.exim.gov/oig/audits.cfm.

[13] Office of Management and Budget (OMB) Circular No. A-11, Part 5, Federal Credit, §185.8, available at http://www.whitehouse.gov/sites/default/files/omb/assets/a11_current_year/s185.pdf.

[14] OMB Circular No. A-129, *supra* note 12.

complies with OMB and Treasury guidelines, it may be authorized to engage in asset sales.

Reinsurance: Reinsurance is insurance coverage that is purchased by an insurance provider (in our case the ECA) from another insurance company (the reinsurer) in order to transfer risk from the original provider to the reinsurer. Among the ECAs, reinsurance is one of the more frequently employed risk mitigation techniques as it allows a greater degree of flexibility. Approximately 62.5% of the OIG respondents confirmed that they use reinsurance to reduce credit exposures. There are two basic methods of reinsurance: facultative reinsurance and treaty reinsurance. Under facultative reinsurance, Ex-Im Bank cedes and the reinsurer assumes all or part of the risk assumed by a particular specified insurance policy. Facultative reinsurance is negotiated separately for each transaction that is reinsured. Facultative reinsurance normally is purchased by ceding companies for individual risks not covered by their reinsurance treaties, for amounts in excess of the monetary limits of their reinsurance treaties and for unusual risks. [15]

Under treaty reinsurance, Ex-Im Bank would execute a reinsurance contract with a reinsurer to provide coverage for all transactions that fall within the defined scope of the contract. This reinsurance option comes in two basic methods: Quota Share Treaty Reinsurance, and Excess of Loss Treaty Reinsurance. The latter provides cost effective coverage while capping the amount of risk to Ex-Im Bank.

Credit Derivative: A credit derivative can be simply defined as a bilateral financial contract in which the “protection buyer” pays a periodic fee in return for a contingent payment by the “protection provider” following a pre-defined “Credit Event”. Unlike a bond or loan, a credit derivative is not a “physical asset”.

The price of the credit derivative is largely determined by the credit risk of the underlying asset. Credit default swaps are the most common type of credit derivatives. An export credit agency would purchase a credit derivative to mitigate the credit default risk of a particular financial asset in its portfolio, or against a broader index of risks. Credit default swaps was the second most commonly used techniques among IACPM survey participants with seventy percent responding affirmatively. In contrast, less than 25% of OIG survey participants, the group composed of ECAs and other U.S. federal agencies, responded affirmatively.

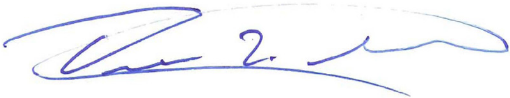
Asset Securitization: Finally, asset securitization is similar to asset sales in that the underlying risk of a loan and/or receivable is transferred to a separate entity — typically a special purpose vehicle. These “assets” are then pooled together with other financial assets, underwritten and sold in the form of asset-backed securities. This process allows investors to diversify their risk by holding a pro rata share of the underlying pool of assets rather than a single exposure. The seller of the financial assets benefits in several respects. First, the seller’s exposure to the loan and/or receivable sold decreases as the asset is sold on a “true sale” or non-recourse basis. Second, the asset-backed security may achieve a lower cost of funding for the seller due to structural enhancements. This technique has been widely used by commercial financial institutions in the past.

[15] http://legal-dictionary.thefreedictionary.com/Facultative+reinsurance

Conclusion:

We hope and trust that Ex-Im Bank management will use this letter, along with our prior report in loss reserve factors issued on September 28, 2012, to re-evaluate how Ex-Im Bank is managing its portfolio risk. In conducting such re-evaluation, Ex-Im Bank and OMB should establish a dialogue to discuss strategies that would protect tax-payers funds and the integrity of Ex-Im Bank's portfolio. Should you have any questions, or would like additional information, please feel free to contact either Mark Thorum, Assistant Inspector General for Inspections and Evaluations or Osvaldo Gratacos at (202) 565-3908. We look forward to our continuing dialogue on this and other matters.

Sincerely,



Osvaldo L. Gratacós
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Appendix A: OMB Correspondence July, 2012
Export-Import Bank OIG Questions

OIG Question

- Has OMB provided guidance on the following issues: (1) portfolio risk measurement including the selection of quantitative and qualitative risk factors, (2) the use of financial models to determine the allowance for loan and lease losses ("ALLL"), and/or (3) portfolio risk mitigation techniques including the use of sub limits for portfolio concentrations (industry, country, one obligor) facultative reinsurance, asset sales and CDS?
- If so, is the guidance agency specific or in the form of broad guidelines?
- What is the process of interaction with agencies? Do agencies approach OMB with their recommendations first, or does OMB dictate policy?

OMB Answer

As way of background, and as an overview, OMB has statutory authority over credit subsidy costs under the Federal Credit Reform Act (FCRA). OMB exercises this responsibility by issuing generally-applicable guidance on the credit subsidy cost estimates, as well as by reviewing and approving all subsidy cost estimates (including the models, methodologies, and assumptions that the agencies have developed and use for making such estimates).

OMB's government-wide guidance on credit subsidy cost estimates is in Section 185 of Circular A-11, at http://www.whitehouse.gov/sites/default/files/omb/assets/a11_current_year/s185.pdf. Section 185 addresses the process by which the agencies should estimate and record their credit subsidy costs, subject to OMB's review and approval. Because the guidance in Section 185 is of a general nature, the guidance does not provide agency-specific or program-specific techniques or factors. Instead, in light of the agencies' expertise and responsibilities for implementing their respective credit programs, OMB has delegated to the agencies – subject to OMB's review and approval – the responsibility for developing models and assumptions for the applicable credit subsidy costs for their respective credit programs. The agencies develop these models and assumptions, which are subject to OMB review and approval, by applying the general OMB guidance.

During the OMB review, OMB works collaboratively with agencies to ensure that all risks, agency risk mitigation techniques, contract terms, and other specific factors that would affect the subsidy cost are accounted for appropriately and accurately in the final subsidy cost estimate, consistent with FCRA.

Please note that the information provided here is in response to a general question, as provided by the Export-Import Bank OIG (and restated above), and not in response to a set of particular facts.