



**OFFICE OF INSPECTOR GENERAL
EXPORT-IMPORT BANK
of the UNITED STATES**

Report on the Asset Management Division's Risk Rating Process

September 23, 2016

OIG-EV-16-02

The Export-Import Bank of the United States (“EXIM Bank”) is the official export-credit agency of the United States. EXIM Bank is an independent, self-sustaining executive agency and a wholly-owned U.S. government corporation. EXIM Bank’s mission is to support jobs in the United States by facilitating the export of U.S. goods and services. EXIM Bank provides competitive export financing and ensures a level playing field for U.S. exports in the global marketplace.

The Office of Inspector General, an independent office within EXIM Bank, was statutorily created in 2002 and organized in 2007. The mission of the EXIM Bank Office of Inspector General is to conduct and supervise audits, investigations, inspections, and evaluations related to agency programs and operations; provide leadership and coordination as well as recommend policies that will promote economy, efficiency, and effectiveness in such programs and operations; and prevent and detect fraud, waste, abuse, and mismanagement.

This evaluation was conducted in accordance with the 2012 Quality Standards for Inspection and Evaluation as defined by the Council of Inspectors General on Integrity and Efficiency. This report does not constitute a Government audit and therefore, it was not conducted following the Generally Accepted Government Auditing Standards (“GAGAS”).



**EXPORT-IMPORT BANK
OF THE UNITED STATES**

To: David Sena, Senior Vice President & Chief Financial Officer
Kenneth Tinsley, Chief Risk Officer & SVP Credit & Risk Management

From: Mark Thorum
Assistant Inspector General, Inspections & Evaluations

Subject: Report on the Asset Management Division's Risk Rating Process

Date: September 23, 2016

Attached please find the final evaluation Report on the Asset Management Division's Risk Rating Process. The report outlines five recommendations for corrective action. On September 15, 2016, EXIM Bank provided its management response to a draft of this report, agreeing with the recommendations. The response identified the Bank's actions to address the recommendations. OIG considers the Bank's actions sufficient to resolve the reported recommendations, which will remain open until OIG determines that the agreed upon corrective actions are successfully implemented. A redacted version of this report will be posted on the OIG website shortly.

We appreciate the courtesies and cooperation extended to us during the evaluation. If you have any questions or comments regarding the report, please contact Mark Thorum at (202) 565-3939.

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Attachment: Report on the Asset Management Division's Risk Rating Process:
OIG-EV-16-02, September 23, 2016

EXECUTIVE SUMMARYEvaluation Report AMD Risk Rating Process
OIG-EV-16-02, September 2016**Why We Did This Evaluation**

AMD's mission is to proactively preserve the value of the Bank's assets through scheduled and as needed reviews of credit risk ratings to identify vulnerabilities and to take timely remediation action when required. The scope of AMD's portfolio is material, representing \$38.2 billion (40 percent) of the Bank's total exposure of \$ 94.4 billion as of March 31, 2016.

An accurate and timely assessment of the portfolio's BCL risk rating is critical to (i) the proper allocation of credit loss reserves and subsidy, (ii) prompt response to adverse credit developments to safeguard taxpayer funds and (iii) the achievement of EXIM Bank's mission.

What We Recommend

To further align current risk rating policies with industry best practices, OIG recommends that EXIM Bank supplement the existing qualitative and quantitative approach to measuring credit risk for obligors by (i) ensuring the rating reports state the findings and results of the prior year's Monitoring Plan; (ii) for project finance, testing and performing sensitivity analysis on key risk assumptions in the financial projections; (iii) introducing quantitative benchmarks for key risk metrics including sector specific ranges whenever possible; (iv) adopting a consistent methodology for evaluating qualitative criteria; and (v) ascribing greater weight to key risk factors when those risks represent a material adverse risk to the overall credit quality of the transaction.

What We Found

We evaluated the Asset Management's Division's ("AMD") risk-rating policies and procedures to ascertain the level of credit analysis, methodology employed, and timeliness of the risk-rating review process for post-operative transactions and to assess the Bank's adherence to its policies, governmental guidelines and industry best practices.

OIG reviewed a judgmental sample of 31 obligors representing a range of industries, borrowers and transaction types. In addition, OIG conducted interviews to understand the application of AMD's Budget Cost Level ("BCL") risk rating policies and to ascertain the best practices observed by peer institutions including foreign export credit agencies ("ECAs"), other U.S. government agencies and multilateral financial institutions.

OIG found that AMD is generally adhering to its internal BCL risk-rating policies and procedures. In its review, OIG concluded that the risk rating reports are completed in a timely manner, address principal risks such as industry and country risks, and contain the required components such as covenant compliance, Character, Reputation and Transaction Integrity ("CRTI"), and environmental reports.

OIG recommends that EXIM Bank take additional steps to further align current policies with industry best practices. For example, although internal guidance provides quantitative metrics to assess key risks, it lacks industry-specific benchmarks for individual risk factor ratings. OIG also found that the lack of precision with certain aspects of the Bank's qualitative framework resulted in inconsistencies within the rating process. In addition, OIG found that updated macroeconomic data such as foreign exchange rates and industry conditions are not consistently incorporated into a Borrower's latest financial projections, resulting in financial analysis that may not fully reflect current market and project risks.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
TABLE OF CONTENTS.....	5
LIST OF FIGURES AND TABLES.....	6
ABBREVIATIONS AND GLOSSARY	7
INTRODUCTION.....	9
SCOPE AND METHODOLOGY	9
BACKGROUND.....	11
PRINCIPAL FINDINGS AND RECOMMENDATIONS	13
CONCLUSION.....	24
APPENDIX A: MANAGEMENT RESPONSE AND OIG EVALUATION	26
APPENDIX B: LIST OF REVIEWED OBLIGORS	32
APPENDIX C: DESCRIPTION OF RATING REPORT AND RISK FACTORS	33
APPENDIX D: DETERMINATION OF OBLIGOR BCL RISK RATING	35
APPENDIX E: CORPORATE RISK RATING CHART.....	36
APPENDIX F: OIG MONITORING PLAN OBSERVATIONS.....	38
ACKNOWLEDGEMENTS.....	39

LIST OF FIGURES AND TABLES

Figure 1: Overview of AMD PCPM Risk Rating Process 13

Figure 2: Leverage Ratio vs. Leverage Risk Factor Grade 19

Figure 3: Debt Service Ratio vs. Debt Service Coverage Risk Factor Grade..... 20

Table 1: Financial Projections – Project Financings 15

Table 2: Corporate Specific Risk Factors and Rating Guidance 21

Table 3: Summary of Management’s Comments on the Recommendations 30

Table 4: Obligor Selection List 32

Table 5: Bank, Corporate and Project Risk Rating Models 34

Table 6: Bank Risk Rating Process..... 35

Table 7: OIG Monitoring Plan Observations 38

ABBREVIATIONS AND GLOSSARY

Term	Description
AMD	Asset Management Division, EXIM Bank
Bank or EXIM Bank	Export-Import Bank of the United States
BCL or Risk Rating	Budget Cost Level (“BCL”) is a risk rating system of EXIM Bank that rates a transaction on a sliding scale of 1 (low risk) to 11 (high risk). The BCL rating determines loss reserves that will be allocated by the Bank for the transaction.
Board	The Board of Directors, EXIM Bank, responsible for approving all project financing transactions over \$10 million.
Board Memo/ Memorandum	A memorandum submitted to the EXIM Bank Board as part of the process for approving a transaction for Bank support.
Buyer	Foreign buyer of U.S. capital goods or services
CRTI	Character, Reputational and Transaction Integrity. CRTI due diligence is a process initiated by EXIM Bank to vet transaction participants, which consists of analysis of companies and individuals to identify potential fraud, corruption and integrity risks associated with parties to a transaction.
DSCR	Debt Service Coverage Ratio. DSCR is calculated as the amount of cash available from operations divided by debt service (the sum of principal and interest).
ECA	Export Credit Agency
EOL	EXIM Online is the Bank’s Asset Management System of its obligors, with key records such as transaction profiles, rating reports, covenants, trip reports and key documents among others.
ERS	Enterprise Risk System. ERS is EXIM Bank’s database that aggregates data on the Bank’s obligors, transactions and exposures.
FY	Fiscal Year
ICRAS	Interagency Country Risk Assessment System. The ICRAS process involves the periodic assessment of the credit risk associated with U.S. credit assistance to foreign countries utilizing a confidential interagency process.
Loan Manual	EXIM Bank’s Loan, Guarantee and Insurance Manual, which sets forth the policies and procedures for due diligence, structuring and monitoring of Bank transactions.
Monitoring Manual	EXIM Bank’s Asset Management Division Operating Manual
Obligor	The Borrower, an entity who is legally or contractually obligated to repay EXIM Bank financing.
OIG	Office of Inspector General, EXIM Bank
Operative Date	The date that the transaction has satisfied all conditions precedent and is available for funding.
Optimization Manual	Asset Monitoring System Report Optimization Project Operating Manual and risk factor attachments

Term	Description
Origination	EXIM Bank's Trade Finance Division and Structured and Project Finance Division. These divisions are responsible for the origination (i.e., structuring, obtaining credit approval and documenting the transaction) of all medium- and long-term transactions excluding transportation and aircraft.
PMCG	Portfolio Monitoring and Control Group, EXIM Bank AMD
PCPM	Project and Corporate Portfolio Management Group, EXIM Bank AMD
TPMD	Transportation Portfolio Management Division, EXIM Bank

EVALUATION REPORT ON AMD'S RISK RATING PROCESS

INTRODUCTION

We completed a review of the Asset Management Division's ("AMD") Project and Corporate Portfolio Management Group's ("PCPM") Budget Cost Level ("BCL") risk-rating policies and procedures to ascertain the level of credit analysis, methodology employed, and timeliness of the BCL risk rating review process for post-operative transactions and to assess the Export-Import ("EXIM") Bank's adherence to its policies and procedures, governmental guidelines and industry best practices. We initiated the review as part of our annual work plan. Several factors motivated this evaluation:

- The size and scope of AMD's portfolio are material, representing about \$38.2 billion of the Bank's total exposure of approximately \$94.4 billion as of March 31, 2016;
- An accurate and timely assessment of an obligor's BCL risk rating is critical to (i) the proper allocation of credit loss reserves and subsidy, (ii) the achievement of EXIM Bank's mission and (iii) safeguarding taxpayer funds;
- AMD's mission is to proactively preserve the value of the Bank's assets through scheduled and as-needed risk-based credit reviews of BCL ratings to identify vulnerabilities and to take timely remediation action, providing critical feedback to underwriting; and
- EXIM Bank faces a challenging economic environment in several key industry sectors.

SCOPE AND METHODOLOGY

To achieve our objectives, we reviewed a judgmental sample consisting of 31 obligors managed within AMD. The sample included a mix of BCL risk ratings, countries and industries, covering 66 percent of AMD's overall exposure of \$38.2 billion. The selected obligors were chosen from AMD's PCPM portfolio. As of March 31, 2016, the PCPM portfolio represents about 93 percent of AMD's exposure. See Appendix B for a list of the reviewed obligors.

The following evaluative criteria were used to assess the accuracy and timeliness of the risk rating process with respect to the sampled obligors:

- the timeliness of the credit reviews;
- the scope of the financial analysis and projections, including sensitivity analysis and use of current macroeconomic, industry outlook and other relevant sources of data;
- the validity and clarity of the risk rating models;
- the level of congruence of the BCL risk rating with external risk indicators such as public credit ratings when available;

- the completion of Character, Reputational and Transaction Integrity (“CRTI”) and environmental reviews as required; and
- the monitoring plan and subsequent follow ups.

In undertaking its review, the Office of Inspector General (“OIG”) accessed internal databases including the Bank’s Enterprise Risk System (“ERS”) and EXIM Online (“EOL”) to confirm that the required internal documents were available and current. Specific to EOL, OIG reviewed the obligor’s first risk rating report as well as any subsequent rating update reports from fiscal years (“FY”) 2013-2015. OIG reviewed the Bank’s assessment of obligor risk factors such as country risk, financial risk, operating risk as prescribed by AMD guidance. See Appendix C for more details on EXIM Bank’s risk rating reports. OIG then analyzed various internal documents pertaining to each transaction including trip reports, financial statement metrics, financial projections, and public and open source documents.

OIG conducted a series of internal interviews with EXIM Bank divisions including the Office of Chief Financial Officer (“OCFO”) and AMD to gain an understanding of the Bank’s current practices related to the BCL risk rating process and their application. OIG conducted external interviews to ascertain the best practices observed by credit rating agencies, peer institutions including foreign export credit agencies (“ECAs”), other U.S. government agencies, and multilateral financial institutions. Finally, two points of inquiry directed our focus and helped guide our evaluation:

Points of Inquiry

The following points of inquiry directed our focus and helped guide our evaluation:

POINT OF INQUIRY 1: Is AMD adhering to the risk review and monitoring procedures outlined in current policy guidelines?

POINT OF INQUIRY 2: Does the AMD credit risk review process result in accurate, timely risk ratings and conform to industry best practices?

The OIG conducted this evaluation during FY 2016 in accordance with the 2012 Quality Standards for Inspection and Evaluation as defined by the Council of Inspectors General on Integrity and Efficiency.¹ Those standards require that we plan and perform the evaluation to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings, conclusions and recommendations based on our evaluation objective and points of inquiry. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions.

¹ For more information, see <https://www.ignet.gov/sites/default/files/files/committees/inspect-eval/iestds12r.pdf>.

BACKGROUND

The Export-Import Bank (“EXIM Bank” or “Bank”) is an independent federal agency and wholly-owned government corporation whose mission is to aid export financing to maintain or create U.S. jobs. The Bank’s Charter authorizes it to engage in “general banking business.”² Its core financing programs are direct loans, export credit guarantees, working capital guarantees, and export credit insurance. The Charter requires “reasonable assurance of repayment” for all EXIM Bank transactions, which are backed by the full faith and credit of the U.S. Government. The Bank has functioned on a self-sustaining basis since FY 2008, covering its operational costs and provisioning for expected losses through loan loss reserves, funded by the fees and interest it charges its customers.

EXIM Bank Portfolio Monitoring

The EXIM Bank portfolio is monitored by two separate groups: AMD and the Transportation Portfolio Management Division (“TPMD”). AMD is responsible for the monitoring of all medium- and long-term transactions originated by the Bank’s Trade Finance Division and Structured and Project Finance Division (“Origination”). TPMD is responsible for the monitoring of transactions originated by the Transportation Division including aircraft.

Within AMD, there are two groups responsible for managing operative credits: PCPM and the Portfolio Monitoring and Control Group (“PMCG”). PCPM covers all non-sovereign obligors with an aggregate exposure of over \$20 million, while PMCG covers all sovereign obligors of any exposure level and non-sovereign obligors with an aggregate exposure of \$20 million or less. Both groups have the responsibility to monitor compliance, review and process amendments, complete periodic assessment of obligor risk, and with the support of other specialized groups, manage troubled assets to ensure the Bank receives the highest reasonably possible recovery rate. Both PCPM and PMCG are responsible for credit monitoring once the transaction is transferred from Origination. Presently, PCPM monitors 94 obligors with an aggregate exposure of \$38.2 billion representing 93 percent of AMD’s exposure. As OIG’s evaluation focused on PCPM obligors, the section below will focus on the PCPM obligor risk rating process.

PCPM Obligor Risk Rating Process

Once an obligor is transferred from Origination to PCPM, the obligor is assigned to one of three categories:

- Corporate obligor – EXIM Bank lends to the borrower based on the strength of the borrower’s balance sheet
- Bank obligor – Similar to corporate obligor, except EXIM Bank lends to a bank

² See *The Charter of the Export-Import Bank of the United States* at http://www.exim.gov/sites/default/files/2015_Charter_-_Final_As_Codified_-_02-29-2016.pdf.

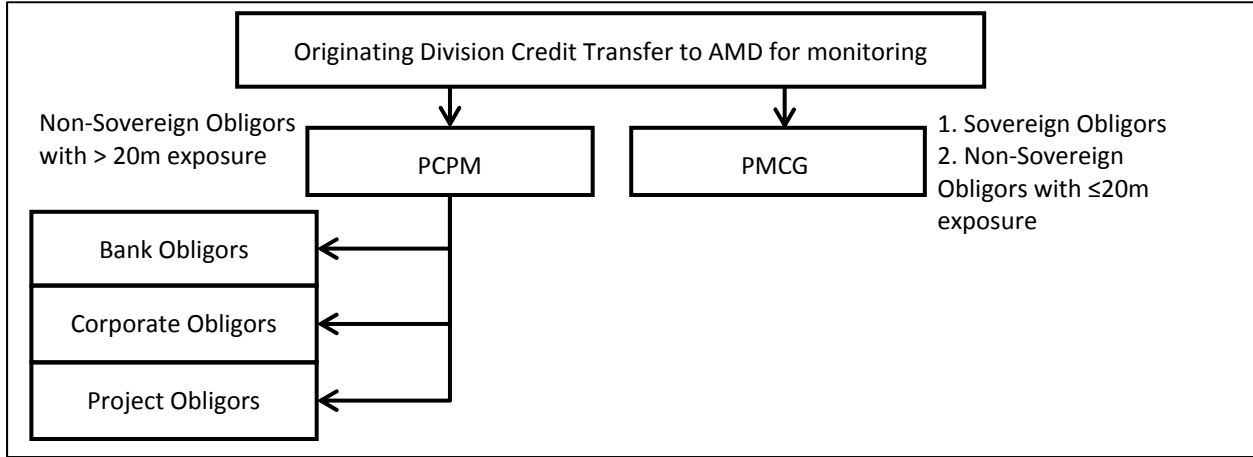
- Project obligor – EXIM Bank lends to a project finance borrower based primarily on the strength of project cash flows

The three types of obligors then undergo a process of credit transfer and annual review as outlined below. See Figure 1 below for an outline of the PCPM risk rating process.

1. Timing of credit transfer to PCPM:
 - a. Bank and Corporate obligors: The credit transfer date is the date in which the transaction is made operative, i.e., “Operative Date.”
 - b. Project obligors: In addition to the Operative Date, project-related transactions must have a “clean disbursement,” i.e., no amendments or waivers of conditions precedent to disbursement before the transaction is transferred from Origination to PCPM.
2. Documentation requirements during credit transfer:
 - a. Bank and Corporate obligors: Origination transfers all existing documentation relevant to the transaction to AMD during the credit transfer.
 - b. Project obligors: In addition to handing over existing documentation, Origination is required to complete a risk rating matrix describing the key risks of the transaction.
3. Scope and timing of full rating reports: Once the credit is transferred from Origination, all PCPM obligors are rated on an annual basis or more frequently as necessary, with report submission and approval for annual reviews due on July 15th and August 31st of each year, respectively. If the credit transfer date is less than six months before the next report submission date, a confirmation report of the risk rating issued by Origination is completed within six months in lieu of a full report, which would be due the following year.

A full rating report is based on PCPM’s assessment of defined risk factors. As defined by EXIM Bank policy, these risk factors contain a mixture of qualitative elements and quantitative ratios and are generally rated on a BCL scale of 1 to 11.
4. An overall BCL risk rating is assigned to the obligor based on a weighted average of the risk factors. Bank, corporate, and project obligors each have a unique report format due to different sets of defined risk factors for the risk rating. In addition to risk rating details, the reports also cover areas such as a monitoring plan, CRTI results and environmental compliance. The rating reports are also supplemented with information to support the risk analysis, such as macroeconomic, industry, and obligor credit reports. See Appendix C for more details on the risk rating reports and Appendix D for more details on the risk rating determination process.
5. Subsequent ratings: After a full rating report is issued, subsequent rating update reports are generally issued on an annual basis. If there are signs of credit deterioration, a full restructuring report or rating update report is issued on an “as needed” basis.

Figure 1: Overview of AMD PCPM Risk Rating Process
 (Confidential and Proprietary Information)



Source: Information based on Loan Manual

PRINCIPAL FINDINGS AND RECOMMENDATIONS

In writing this report, OIG recognizes that our findings and recommendations primarily relate to the judgmental sample of 31 obligors reviewed to assess the accuracy and timeliness of AMD’s BCL risk rating process, and may not necessarily be generalizable to the broader universe of EXIM Bank transactions. The report is guided by the two points of inquiry listed above. For each point of inquiry, OIG provides applicable standards based on EXIM Bank’s policies and procedures, market best practices, peer entities, as well as rating criteria. The report continues with OIG’s findings and attendant recommendations to management.

OIG also recognizes that EXIM Bank management has convened an interdivisional taskforce, coordinated by the Credit Policy Committee and comprised of representatives of the applicable operating divisions, to determine how prior recommendations on internal risk scoring models cited by S&P Capital IQ Risk Solutions (“S&P”)³ including recommendations that may impact the AMD risk rating reports, will be implemented and second to develop a time frame for completion. This evaluation focuses on the current AMD risk rating policies and procedures.

³ In FY 2015, EXIM Bank’s Audit Committee engaged S&P to conduct an independent review of the Bank’s BCL risk ratings for transactions. S&P completed their assessments of AMD risk rating models on May 27, 2015.

Point of Inquiry 1: Is AMD adhering to the risk review and monitoring procedures outlined in current policy guidelines?

Applicable Standards

OIG reviewed various Applicable Standards and focused on the following:

1. EXIM Bank's AMD procedures and risk rating guidance:
 - a. Guidelines for credit transfer from Origination to AMD PCPM for monitoring as outlined in Chapters 6, 7, and 14, Post-Operative Monitoring guidelines as outlined in Chapter 22, and Financial Modeling guidelines as outlined in Chapter 14 of the Bank's Loan, Guarantee and Insurance Manual, updated April 2015 ("Loan Manual");
 - b. Asset Monitoring System Report Optimization Project Operating Manual and risk factor attachments, revised Sept 2013 ("Optimization Manual"); and
 - c. Asset Management Division Operating Manual, March 2009 ("AMD Operating Manual").

EXIM Bank's AMD procedures and risk rating guidelines

AMD PCPM procedures and risk rating guidelines cover the life of a PCPM asset after transfer from Origination. The PCPM risk rating process is on an obligor basis. Each obligor is rated on individual risk factors, with the obligor's overall BCL rating a result of the weighted average of individual risk factors. In addition to risk rating, PCPM is also responsible for relationship management, site visits, amendments, waivers, monitoring plans, covenant compliance, and EXIM Bank policy compliance such as CRTI through the rating reports. Please see Appendix C for more details on the PCPM risk rating reports.

Finding 1: OIG tested compliance with various AMD requirements and determined that AMD is generally adhering to those requirements.

OIG checked policy compliance in the following areas and the results were as follows:

- Timeliness of credit reviews: All credit reviews were in compliance with reporting requirements.
- Identification and discussion of required risk factors: All rating reports included a qualitative discussion of the required risk factors.
- Covenant compliance: OIG did not find any unaddressed issues of covenant irregularities.
- Inclusion of CRTI and environmental reviews: All rating reports included a CRTI review and when required an environmental review.

- Inclusion of monitoring plans: All initial rating reports included a monitoring plan. While AMD generally followed through with the monitoring plan in subsequent rating updates, there were a few cases⁴ where AMD did not follow through with the monitoring plan. See Appendix F for more details on the few cases of non-adherence to the plan.
- Use of financial projections and ratios: All rating reports included the suggested quantitative ratios for risk rating. However, Bank policies for project financings require a detailed analysis of the financial projections including a review of assumptions and sensitivities.⁵ OIG’s judgmental sample of 31 obligors included 14 project financings. We specifically reviewed the projections for 11 of those project financings and found that five could have benefited from a more detailed review of the cash flow assumptions and modeling of sensitivities affecting project economics and riskiness. Further, these rating reports were silent on the results of the sensitivity analysis of the financial projections. See Table 1 below for the results of this finding.

Table 1: Financial Projections – Project Financings Insufficient Analysis of Projections		
Obligor	Exposure (\$MM)	Comment
(b) (4)	(b) (4)	Currency devaluation was excluded in the financial projections during the five-year construction period and underestimated during the operating period. The underestimate of the currency devaluation resulted in an un-forecasted construction cost overrun of (b) (4) ^{6,7} and understated cost of hedging during operation. These factors combined with a serious lack of rate relief, the increasing cost of hedging, and others factors, led eventually to a reduction in the BCL risk rating from (b) (4) in 2014 to (b) (4) in 2015. ⁸
(b) (4)	(b) (4)	Although the project faces an increasing cost of hedging as highlighted in the rating reports, these costs were not sufficiently reflected in the 2014 and 2015 financial projections. The costs

⁴ (b) (4)

⁵ Loan Manual, Chapter 14, page 27

⁶ (b) (4)

⁷ OIG notes that the construction cost overrun was covered by the project sponsor and not EXIM Bank financing.

⁸ Since September 2015, AMD risk monitoring on (b) (4) has included continuous review of current hedging by (b) (4) against the project’s hedging requirements. This included engaging in November 2015 a hedging advisory firm, (b) (4), to conduct an analysis of the hedging strategy for (b) (4).

Table 1: Financial Projections – Project Financings Insufficient Analysis of Projections		
Obligor	Exposure (\$MM)	Comment
		were based on 2012, not the current costs which exceeded the annual revenue of the project. ⁹ The rating of this project in 2014 and 2015 was (b) (4) but was revised in 2016 to (b) (4) to reflect updated projections of cash flow.
(b) (4)	(b) (4)	The project faces an increasing cost of hedging but such cost was not sufficiently reflected in the financial projections in 2015 based on sensitivity analysis and forecasted exchange rates. The rating of this project in 2014 and 2015 was (b) (4) but was revised in 2016 to (b) (4) to reflect updated projections of cash flow.
(b) (4)	(b) (4)	(b) (4) is an uncompleted project guaranteed by (b) (4). Additionally, (b) (4) guarantees the loans to (b) (4) through support payments. (b) (4) revenues are in (b) (4). Although the analysis by the Bank’s financial advisor broadly and critically evaluated (b) (4), the cash flow projections omitted foreign exchange exposure and the potential effect on (b) (4) ability to support its U.S. dollar guarantees and contingent liabilities.
(b) (4)	(b) (4)	The Board Memo at origination included sensitivities on foreign exchange, low oil prices, operating costs, and project availability. However, although the rating reports for 2014 and 2015 noted a (b) (4) depreciation of the country’s currency and a major drop in oil prices, the reports did not include a comprehensive sensitivity analysis of the factors tested during origination and did not re-run the model to update the projected Debt Service Coverage Ratios. Further, as reported in the 2015 report, the project experienced an (b) (4) construction cost overrun of (b) (4), ¹⁰ (b) (4) due to unhedged foreign exchange exposure, affecting the project competitiveness and value. OIG notes that the cost overrun will be funded by the sponsors under the completion guarantee and will not involve additional loans from EXIM Bank. The rating of this project was (b) (4) in 2014 and 2015, but was revised downward in 2016 to (b) (4) based on the steep decline in crude oil prices.

Source: OIG observations of obligor projections and Bank rating reports

⁹ In 2016, EXIM Bank amended the strike price of the hedging agreement to make the cost of hedging affordable for the next five-year period.

¹⁰ *Supra* note 7.

RECOMMENDATIONS

To enhance EXIM Bank’s risk review and monitoring procedures, OIG recommends the following:

1. Rating reports state the findings and results of the prior year’s Monitoring Plan.
2. For project financings, conduct an updated review of the financial model and assumptions, perform sensitivity tests as appropriate, and document the results in the rating reports to include the effect on repayment risk and debt service coverage.

Management Response:

Please see Appendix A, Management Response and OIG Evaluation.

Point of Inquiry 2: Does the AMD credit risk review process result in accurate, timely risk ratings and conform to industry best practices?

Applicable Standards

OIG reviewed various Applicable Standards and focused on the following:

1. EXIM Bank’s AMD PCPM procedures and risk rating guidance:
 - a. Guidelines for credit transfer from Origination to AMD PCPM for monitoring as outlined in Chapters 6, 7, and 14, Post-Operative Monitoring guidelines as outlined in Chapter 22, and Financial Modeling guidelines as outlined in Chapter 14 of the Bank’s Loan Manual;
 - b. Optimization Manual; and
 - c. AMD Operating Manual;
2. Industry practices as observed by peer institutions including Federal Agencies, foreign ECAs, and multilateral development banks.

EXIM Bank’s AMD procedures and risk rating guidelines

See Point of Inquiry 1 above for a description of these procedures and guidelines.

Industry Practices

These institutions incorporate a risk scorecard approach that uses a combination of qualitative criteria and quantitative metrics such as sector specific criteria.

Finding 2: AMD’s review process produces risk ratings that are timely and generally aligned with comparable ratings from credit rating agencies. However, there are some departures from industry practices that should be addressed.

Of the 31 obligors in the judgmental sample, OIG found that the Bank’s overall rating of obligors, sponsors, and countries to be generally consistent and comparable to the ratings from credit rating agencies. However, OIG’s comparison at the obligor level is

limited, because 14 project obligors and seven bank/corporate obligors in the OIG's sample are not publically rated at the obligor level.

In comparing the Bank's BCL risk rating process with the rating agencies methodologies and industry practices, OIG observed several departures from industry practices that in the aggregate reduce the accuracy and replicability of the risk rating outcome. The potential for rating misalignment is heightened for obligors that are unrated by credit agencies since the Bank's utilization of external credit ratings as a useful reference point is limited. The differences in practices are detailed in the findings below.

Finding 2A: EXIM internal guidance prescribes which metrics to use to determine individual risk factor ratings and provides a qualitative framework to assess risks. However, further refinements are needed for both quantitative and qualitative analyses to reflect industry practice.

Lack of Benchmarks for Quantitative Metrics

Internal Bank guidance generally does not provide specific numeric ranges for financial risk factor ratings or sector-based benchmarks, leading to inconsistencies in how key credit ratios are aligned with risk ratings. EXIM Bank guidance prescribes the use of key financial ratios, such as debt/net worth ratio or debt service coverage ratio, as quantitative measures for leverage risk. However, there is no guidance that correlates or links a numeric range for the ratios with each risk-rating level, which is a departure from the practices benchmarked at other agencies. In addition, EXIM Bank guidance does not provide industry-specific benchmarks, aside from a few exceptions such as the Tier 1 capital ratio for Bank obligors. Without specific guidance for numeric ranges, there is a lack of consistent alignment among a Borrower's actual financial ratios and respective BCL risk factor grades.

For instance, AMD's Optimization Manual prescribes the use of a debt/net worth ratio as the quantitative measure for leverage risk. Whereas the Optimization Manual provides a broad description for each level of leverage risk factor grade,¹¹ it does not provide specific ranges or benchmarks for each risk factor grade. Absent benchmarks, portfolio managers use the broad definitions to assess the level of risk, thereby increasing the risk of subjective interpretation and inconsistency across obligor ratings.

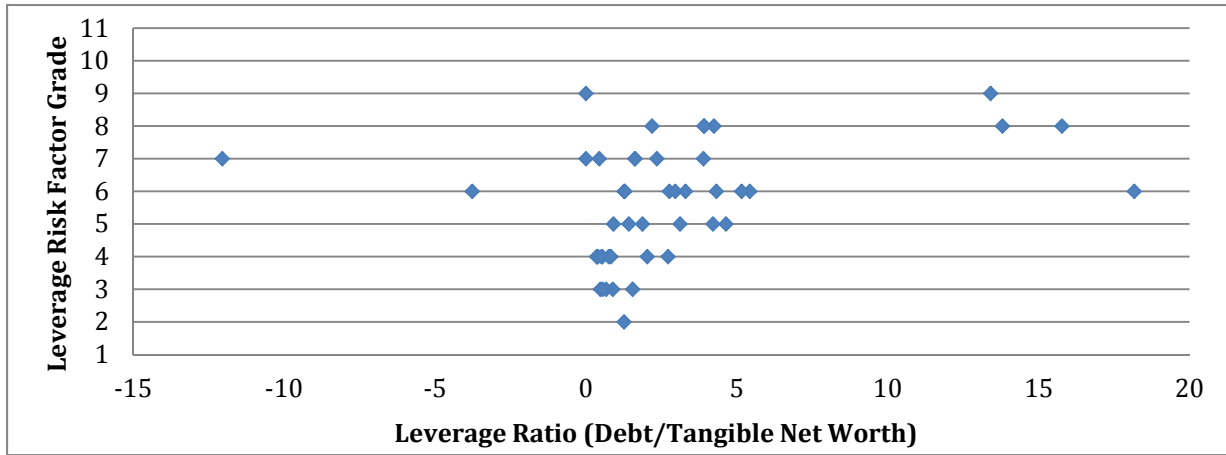
In our sample, we found obligors with widely varying ratios receiving similar risk factor grades for leverage, and obligors with similar ratios receiving different risk factor grades for leverage. For example, in 2015, the Bank assigned a 5 risk factor grade for leverage risk to (b) (4) with a debt/net worth ratio of 4.2. In contrast, the Bank assigned a 6 risk factor grade for leverage risk to (b) (4) with a debt/net worth ratio of 18.2, only one rating notch lower despite a difference in leverage of over 400 percent. Although (b) (4) debt/net

¹¹ For example, Bank guidance notes that a leverage risk factor grade of "1 or 2" equates to very low leverage, "3 or 4" equates to low leverage, and so forth without guidance for numeric ranges.

worth ratio of 18.2 was ascribed a 6 risk factor grade, the ratio exceeded the range of ratios of other corporate obligors whose leverage risk factor grade was rated between 7 and 9.

The extent of the potential misalignment is more evident at the level of the entire judgmental sample. For example, in Figures 2 and 3 below, there is a wide dispersion of ratios when mapped to the respective obligor’s risk factor scores. Although the general guidance should produce higher risk ratings in cases where there is higher leverage or a lower debt service coverage ratio, the expected trend is not evident, with several outliers. When the ratio was a clear outlier to the sample, OIG found that the individual rating reports did not provide sufficient qualitative explanations to justify the outlier’s risk factor grade.

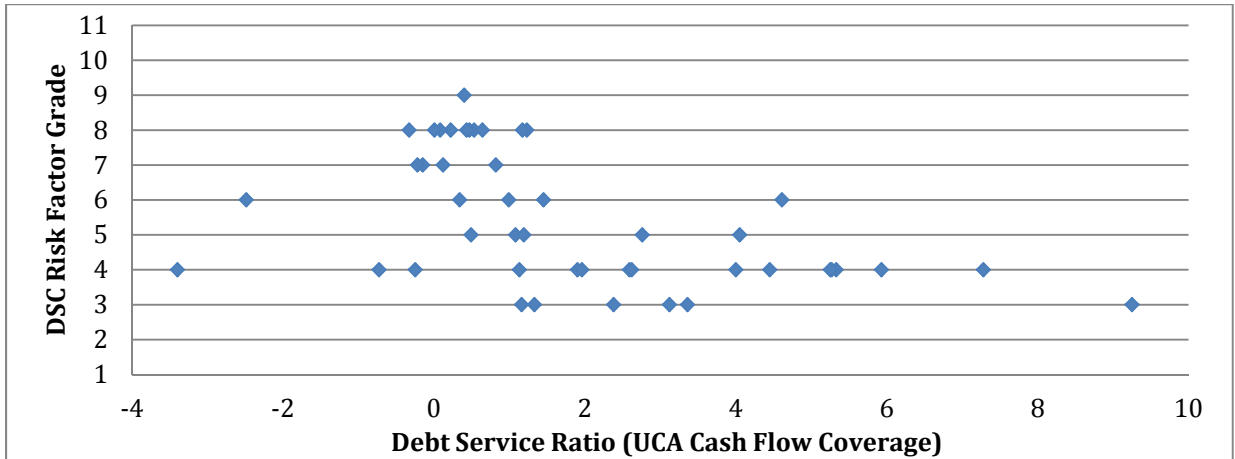
Figure 2: Leverage Ratio vs. Leverage Risk Factor Grade¹²
 (Confidential and Proprietary Information)



Source: Information based on all corporate risk rating reports in OIG’s sample

¹² There are some obligors with net leverage ratios due to negative equity.

Figure 3: Debt Service Ratio vs. Debt Service Coverage Risk Factor Grade¹³
(Confidential and Proprietary Information)



Source: Information based on all corporate risk rating reports in OIG's sample

Lack of precise guidance within the Qualitative Framework

Lack of precise guidance within the qualitative framework contributes to potential discrepancies in the application of the risk factor grades. Although the qualitative framework specifies sub-factors that should be evaluated for each risk factor, EXIM Bank does not have specific guidance on how sub-factor ratings are translated into the overall risk factor rating. In our sample of obligors, we found inconsistencies where differing sub-factor ratings did not lead to different risk factor ratings. The qualitative framework used for both corporate and project finance risk assessments lacks precise evaluative criteria for individual risk factor grades.

The following examples illustrate the inconsistent application of qualitative factors assessment on individual obligors:

- In (b) (4) ' June 30, 2014 rating update report, industry risk was rated a 4. The industry risk factor is supported by the sub-factors structural change, price and demand volatility and competitive risk, which were all rated as low in the report. (b) (4) was subsequently re-rated during the reporting period November 30, 2014. The industry risk sub-factors structural change, price and demand volatility and competitive risk were downgraded to medium, high, and medium, respectively. However, (b) (4) industry risk score remained a 4.
- In 2010, (b) (4) ' leverage risk was rated as low with a leverage risk factor rating of 5. From 2013-2015, (b) (4) ' leverage risk was rated as medium with a leverage risk factor rating of 4.

¹³ There are some obligors with negative debt service coverage ratios due to negative net cash after operations.

- Management risk is based on two sub-factors: experience risk, and stability and integrity risk. In one risk rating report, management risk was rated a 5 with experience risk rated as low, and stability and integrity risk rated as medium. In another risk rating report, management risk was rated a 4, yet both experience risk and stability and integrity risk were rated as medium.

In comparison, the rating methodology of qualitative factors at peer agencies ensures consistency in ratings through clearly defined rating grades and process, including the appropriate sequence of steps used to analyze the underlying risks.

Lack of Precise Guidance within Paired Risk Ratings

The rating of corporate risk factors ranges from 1 to 11 with 1 being the lowest risk and 11 being the highest risk where losses appear inevitable. However, the Bank’s guidance for assigning these ratings is grouped in pairs, i.e., risk ratings 1&2, 3&4, 5&6, 7&8, and 9&10. This approach of grouping ratings with the same guidance makes the assignment of a specific rating unclear.

For example, the rating guidance is the same for leverage, debt service, and management risks for risk ratings 7&8, where a “7” is “Special Attention - Potential Risks for Emerging Problems” and an “8” is “Substandard – Emerging Problems.” There is a difference between a Special Attention Loan and a Substandard Loan. However, the Bank’s criteria are the same, making the specific rating classification unclear and inconsistent. See Table 2 below for more details. Likewise, the lack of clarity and overlapping criteria exists for the scoring of other corporate risk factors and project finance risk factors.

Table 2: Corporate Specific Risk Factors and Rating Guidance	
Risk Factor	BCL Risk Rating Classes 7&8
<u>Leverage Risk</u> Measure of the level of indebtedness and financial flexibility	High to moderate leverage. Limited financial flexibility; even and unstable trend; ratios essentially the same or slightly worse than average and moderately high to high risk of adverse change in financial flexibility.
<u>Debt Service Coverage Risk</u> Measure of the obligor’s ability to meet all its debt service obligations	Limited capacity to pay interest and debt maturities without refinancing; somewhat questionable ability for refinance; even and unstable trend and moderately high to high risk of cash erosion.
<u>Management Risk</u> Measure of overall management strength, depth and integrity	Management’s experience and integrity is deemed to be adequate. Corporate structure is difficult to understand. Management is by owner’s family and no clear succession plan exists.

Source: Excerpts from AMD Operating Manual, March 2009

Finding 2B: As the overall BCL rating is generally based on a fixed weighted numerical average of individual risk factor grades, especially high risk factors may not be adequately reflected in the overall BCL rating.

EXIM Bank calculates the overall BCL risk rating as a fixed weighted numerical average of individual risk factor grades. Because of this methodology, an especially high risk factor that creates a significant overall risk can be offset by lower risk factors due to the fixed weighting system. As a result, the BCL rating does not necessarily reflect the significant overall risk posed by a high risk factor. Further, this approach may understate the impact of the strongest negative risk factors in the overall risk assessment and is inconsistent with rating agency methodology.¹⁴

For example, in 2014 and 2015, project obligor (b) (4) was rated at the highest risk factor grade for management risk (equivalent to a BCL 11). However, since the Bank employs a fixed weighted average, this significant risk factor was offset by other risk factors and resulted in an overall obligor BCL risk rating of 6. Based on OIG's research, peer groups, such as commercial banks, multilaterals, and other federal agencies with a similar lending function, generally overweigh an especially high risk factor so that the overall risk rating better reflects the significant overall risk.

OIG notes that the Bank has taken similar approaches in the past to alter weights for the rating model based on specific scenarios. In 2015, the sovereign country risk weight in EXIM Bank's model became an optional weight if the obligor's industry risk was deemed to be separate from the country risk.

Finding 2C: Sovereign support for individual borrowers is not applied consistently in the BCL risk rating process.

Sovereign support for borrowers generally decreases the risk of a transaction, and therefore is considered in the overall BCL risk rating. However, we found that rating adjustments to reflect sovereign support were inconsistently applied, due to a lack of clear policy. OIG found that rating adjustments for sovereign support were applied to individual risk factor grades on some transactions and to the overall risk rating on others. This inconsistency may lead to divergent outcomes and the inability to replicate the analysis.

¹⁴ For example, Moody's will vary the weights given to financial metrics depending on the overall riskiness of a project as stated in Moody's Rating Methodology Report, "Generic Project Finance Methodology, December 20, 2010, page 7. Another example is that S&P will vary the risk weighting of competitiveness depending on the country and type of industry, as described in S&P's rating report, "General Corporate Methodology," November 19, 2013, pages 24-26. These examples of dynamic, conditional risk weighting are employed on other risk factors as well. OIG also observed that for standalone ratings, credit agencies generally apply a conditional weight increase only when a specific risk factor is negative. However, credit agencies may adjust the final rating based on factors such as strong corporate sponsors or sovereign support.

For example, in 2015, (b) (4), is rated by a credit agency with a standalone rating equivalent of BCL 8 (a sub-standard loan) and a government-supported rating equivalent of BCL 5 (a satisfactory loan). While EXIM Bank's overall BCL rating for (b) (4) is also 5, the Bank's individual risk factor ratings are all in the range of 5 to 6. This suggests that the impact of government support was applied to (b) (4) on the level of the individual risk factors. Another example is (b) (4)

. In 2015, despite three straight years of relatively high-risk debt service coverage ratios, EXIM Bank rated (b) (4) debt service coverage risk at the relatively low-risk level of 3, indicating that the Bank may have considered the sovereign support in assessing the individual risk factor for debt service coverage. In contrast to (b) (4) and (b) (4), EXIM Bank assessed entities such as (b) (4) as a standalone entity when assessing individual risk factors, and then adjusted the overall risk rating at the end of the process to account for sovereign support. This effectively bifurcated the standalone rating and the government-supported rating.

RECOMMENDATIONS

To enhance the accuracy of EXIM Bank's BCL risk rating models, OIG recommends that the Bank undertake the following initiatives:

3. Introduce quantitative benchmarks for key risk metrics including sector specific ranges whenever possible and re-evaluate these benchmarks on scheduled intervals.
4. Adopt a consistent methodology for evaluating qualitative criteria. For example, Bank guidance should include a consistent methodology for rating adjustments due to levels of sovereign support and clear risk rating criteria for individual risk factors.
5. In accordance with rating agency best practices, ascribe greater weight to key risk factors when those risks represent a material adverse risk to the overall credit quality of the transaction.

Management Response:

Please see Appendix A, Management Response and OIG Evaluation.

CONCLUSION

OIG found that AMD is generally adhering to its internal BCL risk-rating policies and procedures. In its review, OIG determined that the risk rating reports are completed in a timely manner, address principal risks such as industry and country risks, and contain the required components such as covenant compliance, CRTI and environmental reports.

OIG recommends that EXIM Bank take additional steps to further align current policies with industry best practices. For example, although internal guidance provides quantitative metrics to assess key risks, it lacks industry-specific benchmarks for individual risk factor ratings. OIG also found that the lack of precision with certain aspects of the Bank's qualitative framework resulted in inconsistencies within the rating process. In addition, OIG found that updated macroeconomic data such as foreign exchange rates and industry conditions are not consistently incorporated into a Borrower's latest financial projections, resulting in financial analysis that may not fully reflect current market and project risks.

Our evaluation produced several key findings related to the points of inquiry:

Point of Inquiry 1: Is AMD adhering to the risk review and monitoring procedures outlined in current policy guidelines?

Finding 1: OIG tested compliance with various AMD requirements and determined that AMD is generally adhering to those requirements.

Recommendations:

To enhance EXIM Bank's risk review and monitoring procedures, OIG recommends the following:

1. Rating reports state the findings and results of the prior year's Monitoring Plan.
2. For project financings, conduct an updated review of the financial model and assumptions, perform sensitivity tests as appropriate, and document the results in the rating reports to include the effect on repayment risk and debt service coverage.

Management Response:

Please see Appendix A, Management Response and OIG Evaluation.

Point of Inquiry 2: Does the AMD credit risk review process result in accurate, timely risk ratings and conform to industry best practices?

Finding 2: AMD's review process produces risk ratings that are timely and generally aligned with comparable ratings from credit rating agencies. However, there are some departures from industry practices that should be addressed.

- Finding 2A: EXIM internal guidance prescribes which metrics to use to determine individual risk factor ratings and provides a qualitative framework to assess risks. However, further refinements are needed for both quantitative and qualitative analyses to reflect industry practice.

- Finding 2B: As the overall BCL rating is generally based on a fixed weighted numerical average of individual risk factor grades, especially high risk factors may not be adequately reflected in the overall BCL rating.
- Finding 2C: Sovereign support for individual borrowers is not applied consistently in the BCL risk rating process.

Recommendations:

To enhance the accuracy of EXIM Bank’s BCL risk rating models, OIG recommends that the Bank undertake the following initiatives:

3. Introduce quantitative benchmarks for key risk metrics including sector specific ranges whenever possible and re-evaluate these benchmarks on scheduled intervals.
4. Adopt a consistent methodology for evaluating qualitative criteria. For example, Bank guidance should include a consistent methodology for rating adjustments due to levels of sovereign support and clear risk rating criteria for individual risk factors.
5. In accordance with rating agency best practices, ascribe greater weight to key risk factors when those risks represent a material adverse risk to the overall credit quality of the transaction.

Management Response:

Please see Appendix A, Management Response and OIG Evaluation.

APPENDIX A: MANAGEMENT RESPONSE AND OIG EVALUATION



EXPORT-IMPORT BANK
OF THE UNITED STATES

September 15, 2016

Michael McCarthy
Deputy Inspector General
Office of the Inspector General
Export-Import Bank of the United States
811 Vermont Avenue NW
Washington, DC 20571

Dear Mr. McCarthy,

Thank you for providing the Export-Import Bank of the United States (“EXIM Bank” or “the Bank”) with the final version of the Office of the Inspector General’s “Report on the Asset Management Division’s Risk Rating Process” (OIG-EV-16-02) on August 25, 2016. EXIM Bank continues to support the OIG’s work, which complements the Bank’s efforts to continually improve its processes. EXIM Bank is proud of the strong and cooperative relationship it has with the OIG.

EXIM Bank appreciates that the OIG acknowledges that the Bank’s Asset Management Division (AMD) “is adhering to its internal BCL risk-rating policies and procedures.” Additionally, EXIM Bank values the OIG’s conclusion “that the risk rating reports are completed in a timely manner, address principal risks such as industry and country risks, and contain the required components such as covenant compliance, CRTI and environmental reports.”

The Bank is proud of its effective management of its portfolio as evidenced by the recent quarterly default rate of 0.264 per cent reported to Congress for the period ending June 30, 2016.

The Bank continuously strives to improve its policies and practices and agrees to all five OIG recommendations in this report.

Recommendation 1: OIG recommends that EXIM Bank undertake the following:

Rating Reports state the findings and results of the prior year’s Monitoring Plan.

Management Response: EXIM Bank concurs with this recommendation. AMD risk rating reports will include the findings and results of the prior year’s Monitoring Plan for that credit.

Recommendation 2: OIG recommends that EXIM Bank undertake the following:

For project financings, conduct an updated review of the financial model and assumptions, perform sensitivity tests as appropriate, and document the results in the rating reports to include the effect on repayment risk and debt service coverage.

Management Response: EXIM Bank concurs with this recommendation. As appropriate, AMD staff will continue to review the financial model and assumptions, further develop capacity to perform and test sensitivity analyses, and document the results and effects on repayment risk and debt service coverage in risk rating reports. Staff will incorporate financial model review and testing guidelines in the AMD Operating Manual.

Recommendation 3: OIG recommends that EXIM Bank undertake the following initiative:

Introduce quantitative benchmarks for key risk metrics including sector specific ranges whenever possible and re-evaluate these benchmarks on scheduled intervals.

Management Response: EXIM Bank concurs with this recommendation. AMD will evaluate and introduce quantitative benchmarks for key risk metrics including sector specific ranges and update its guidelines in the AMD Operating Manual.

Recommendation 4: OIG recommends that EXIM Bank undertake the following initiative:

Adopt a consistent methodology for evaluating qualitative criteria. For example, Bank guidance should include a consistent methodology for rating adjustments due to levels of sovereign support and clear risk rating criteria for individual risk factors.

Management Response: EXIM Bank concurs with this recommendation. AMD will implement a consistent methodology for risk rating qualitative criteria, assignment, and adjustment in line with current AMD Operating Manual guidelines and will develop further guidance on risk rating adjustment and other risk rating evaluation methodology issues.

Recommendation 5: OIG recommends that EXIM Bank undertake the following initiative:

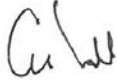
In accordance with rating agency best practices, ascribe greater weight to key risk factors when those risks represent a material adverse risk to the overall credit quality of the transaction.

Management Response: EXIM Bank concurs with this recommendation. AMD will evaluate risk factor grade weighting and will develop revised guidelines to ascribe greater weight to key risk factors when those risks represent a material adverse risk to the overall credit quality of the transaction.

We thank the OIG for your efforts to ensure the Bank's policies and procedures continue to improve, as well as the work you do with us to protect EXIM funds from fraud, waste, and

abuse. We look forward to strengthening our working relationship and continuing to work closely with the Office of the Inspector General.

Sincerely,



Charles J. Hall
Executive Vice President / Chief Operating Officer
Export-Import Bank of the United States

OIG Evaluation

On September 15, 2016, EXIM Bank provided its management response to a draft of this report, agreeing with the five recommendations. The response identified the Bank's actions to address the recommendations. OIG considers the Bank's actions sufficient to resolve the reported recommendations, which will remain open until OIG determines that the agreed upon corrective actions are completed and responsive to the reported recommendations.

The Bank's management response to the reported recommendations and OIG's assessment of the response are as follows:

RECOMMENDATION 1

Recommendation 1: Rating reports state the findings and results of the prior year's Monitoring Plan.

Management Response: EXIM Bank concurs with this recommendation. AMD risk rating reports will include the findings and results of the prior year's Monitoring Plan for that credit.

Evaluation of Management's Response: Management's actions are responsive; therefore, the recommendation is resolved and will be closed upon completion and verification that the actions have been implemented.

RECOMMENDATION 2

Recommendation 2: For project financings, conduct an updated review of the financial model and assumptions, perform sensitivity tests as appropriate, and document the results in the rating reports to include the effect on repayment risk and debt service coverage.

Management Response: EXIM Bank concurs with this recommendation. As appropriate, AMD staff will continue to review the financial model and assumptions, further develop capacity to perform and test sensitivity analyses, and document the results and effects on repayment risk and debt service coverage in risk rating reports. Staff will incorporate financial model review and testing guidelines in the AMD Operating Manual.

Evaluation of Management's Response: Management's actions are responsive; therefore, the recommendation is resolved and will be closed upon completion and verification that the actions have been implemented.

RECOMMENDATION 3

Recommendation 3: Introduce quantitative benchmarks for key risk metrics including sector specific ranges whenever possible and re-evaluate these benchmarks on scheduled intervals.

Management Response: EXIM Bank concurs with this recommendation. AMD will evaluate and introduce quantitative benchmarks for key risk metrics including sector specific ranges and update its guidelines in the AMD Operating Manual.

Evaluation of Management's Response: Management's actions are responsive; therefore, the recommendation is resolved and will be closed upon completion and verification that the actions have been implemented.

RECOMMENDATION 4

Recommendation 4: Adopt a consistent methodology for evaluating qualitative criteria. For example, Bank guidance should include a consistent methodology for rating adjustments due to levels of sovereign support and clear risk rating criteria for individual risk factors.

Management Response: EXIM Bank concurs with this recommendation. AMD will implement a consistent methodology for risk rating qualitative criteria, assignment, and adjustment in line with current AMD Operating Manual guidelines and will develop further guidance on risk rating adjustment and other risk rating evaluation methodology issues.

Evaluation of Management’s Response: Management’s actions are responsive; therefore, the recommendation is resolved and will be closed upon completion and verification that the actions have been implemented.

RECOMMENDATION 5

Recommendation 5: In accordance with rating agency best practices, ascribe greater weight to key risk factors when those risks represent a material adverse risk to the overall credit quality of the transaction.

Management Response: EXIM Bank concurs with this recommendation. AMD will evaluate risk factor grade weighting and will develop revised guidelines to ascribe greater weight to key risk factors when those risks represent a material adverse risk to the overall credit quality of the transaction.

Evaluation of Management’s Response: Management’s actions are responsive; therefore, the recommendation is resolved and will be closed upon completion and verification that the actions have been implemented.

Table 3: Summary of Management’s Comments on the Recommendations				
Rec. No.	Corrective Action: Taken or Planned	Expected Completion Date¹⁵	Resolved: Yes or No¹⁶	Open or Closed¹⁷
1.	The Bank will require AMD’s risk rating reports for credits to include the findings and results of the prior year’s Monitoring Plan.	No target completion date provided	Yes	Open
2.	The Bank, as appropriate, will continue to review the financial	No target completion date	Yes	Open

¹⁵ EXIM Bank OIG has requested target completion dates for each of the outstanding recommendations.

¹⁶ “Resolved” means that (1) Management concurs with the recommendation, and the planned, ongoing, and completed corrective action is consistent with the recommendation; or (2) Management does not concur with the recommendation, but alternate action meets the intent of the recommendation.

¹⁷ Upon determination by the EXIM Bank OIG that the agreed-upon corrective action has been completed and is responsive to the recommendation, the recommendation can be closed.

Table 3: Summary of Management’s Comments on the Recommendations				
Rec. No.	Corrective Action: Taken or Planned	Expected Completion Date¹⁵	Resolved: Yes or No¹⁶	Open or Closed¹⁷
	model and assumptions, develop capacity for analyses performance and testing, and document the results and effects in the risk rating reports. The AMD Operating Manual will be updated to incorporate the financial model review and testing guidelines.	provided		
3.	The Bank will implement quantitative benchmarks for key risk metrics, with updates to the AMD Operating Manual.	No target completion date provided	Yes	Open
4.	The Bank’s AMD will adopt a consistent methodology for risk rating qualitative criteria, assignment, and adjustment; and develop additional guidance on risk rating adjustment and other risk rating methodology issues.	No target completion date provided	Yes	Open
5.	The Bank will review the weighting of risk factor grades and update its guidelines to ascribe greater weight to key risk factors.	No target completion date provided	Yes	Open

APPENDIX B: LIST OF REVIEWED OBLIGORS

Table 4: Obligor Selection List (Confidential and Proprietary Information)					
#	Obligor	Exposure as of March 31, 2016	Industry	Report Type	
1	(b) (4)	(b) (4)	Renewables	Corporate	
2	(b) (4)	(b) (4)	LNG	Project	
3	(b) (4)	(b) (4)	Renewable - Solar	Project	
4	(b) (4)	(b) (4)	Renewable - Solar	Project	
5	(b) (4)	(b) (4)	Gas - Integrated	Corporate	
6	(b) (4)	(b) (4)	Oil & Gas Exploration	Corporate	
7	(b) (4)	(b) (4)	Bank	Bank	
8	(b) (4)	(b) (4)	Oil	Corporate	
9	(b) (4)	(b) (4)	Mining - Bauxite & AL Manuf.	Project	
10	(b) (4)	(b) (4)	Power Generation	Corporate	
11	(b) (4)	(b) (4)	Satellite	Corporate	
12	(b) (4)	(b) (4)	Integrated Circuit Manuf.	Corporate	
13	(b) (4)	(b) (4)	Renewable - Wind	Project	
14	(b) (4)	(b) (4)	Mining - Iron	Corporate	
15	(b) (4)	(b) (4)	Satellite	Corporate	
16	(b) (4)	(b) (4)	Finance Company	Corporate	
17	(b) (4)	(b) (4)	Refinery	Corporate	
18	(b) (4)	(b) (4)	Renewable - Wind	Project	
19	(b) (4)	(b) (4)	Oil	Corporate	
20	(b) (4)	(b) (4)	LNG	Project	
21	(b) (4)	(b) (4)	Oil	Corporate	
22	(b) (4)	(b) (4)	Mining - Gold	Project	
23	(b) (4)	(b) (4)	Airport	Project	
24	(b) (4)	(b) (4)	Refinery	Corporate	
25	(b) (4)	(b) (4)	Gas, Other	Corporate	
26	(b) (4)	(b) (4)	Power, Renewables	Project	
27	(b) (4)	(b) (4)	Agriculture	Corporate	
28	(b) (4)	(b) (4)	Mining - Iron	Project	
29	(b) (4)	(b) (4)	Power	Project	
30	(b) (4)	(b) (4)	Chemical	Project	
31	(b) (4)	(b) (4)	Refinery	Project	
Total Exposure in Sample		\$25,390,919,439			

Source: EXIM Bank, Exposure as of 3/31/2016

APPENDIX C: DESCRIPTION OF RATING REPORT AND RISK FACTORS

Each EXIM Bank, Corporate and Project rating report consists of the following standardized sections:

- Borrower Description and Loan Information: Basic company and loan information such as country, sector, loan program, and amount authorized
- Risk Rating Recommendation: Most recent rating, outlook, and brief commentary on risk rating justification
- Background and Update/ New Exposure and Transaction Developments: Brief description of transaction history and most recent issues
- General Risk Factor Analysis: This section differs by report type.
 - For Bank and Corporate reports, the general risk factors are country risk and industry/competitive position risk. Country risk rating is based on the results of the Interagency Country Risk Assessment System (“ICRAS”) process.
 - For Project reports, the general risk factors are country risk and market/business risk.
- Primary Source of Repayment (“PSOR”) Specific Risk Factor Analysis: This section differs by report type. Some risk factors include measurement of required financial ratios, such as total liabilities/tangible net worth for leverage and Uniform Credit Analysis (“UCA”) cash flow coverage for debt service coverage.
 - For Bank reports, the PSOR specific risk factors are earning strength, liquidity, capital adequacy, asset quality and management risk.
 - For Corporate reports, the PSOR specific risk factors are operating, liquidity, leverage, debt service coverage and management risk.
 - For Project reports, the PSOR specific risk factors are cash flow/liquidity, construction/technical, counterparty, legal & contractual and management risk.
- Structural Credit Enhancements and Risk Adjustment: Discussion on specific credit enhancements, such as guarantees and sovereign adjustments, if applicable
- EXIM Bank Policy Consideration : Discussion on CRTI compliance
- Monitoring Plan: discussion of monitoring frequency, key issues, and steps for risk management
- Risk Rating: Risk rating chart that captures all risk factor grades for general risk factors and PSOR specific risk factors and the final EXIM BCL score for the obligor. Beginning in 2015, the risk rating chart also includes a switch that turns off country risk weight when the obligor’s credit risk is determined to be not dependent on country risk.
- EXIM Bank Team and Approval: Chain of approval and dates

**Table 5: Bank, Corporate and Project Risk Rating Models
Risk Factors and Weights
(Confidential and Proprietary Information)**

(b) (4)

Source: AMD Optimization Manual, May 2010

APPENDIX D: DETERMINATION OF OBLIGOR BCL RISK RATING

Table 6: Bank Risk Rating Process
(Confidential and Proprietary Information)

(b) (4)

Source: AMD Operating Manual and Optimization Manual

APPENDIX E: CORPORATE RISK RATING CHART

(b) (4)

Source: AMD Operating Manual, March 2009

(b) (4)

Source: AMD's Operating Manual, March 2009

APPENDIX F: OIG MONITORING PLAN OBSERVATIONS

Table 7: OIG Monitoring Plan Observations	
Obligor	Non follow-up of Prior Year's Monitoring Plan
(b) (4)	<p>The 2014 Monitoring Plan highlighted the following key issues that were not documented in the 2015 rating report:¹⁸</p> <ul style="list-style-type: none"> • Confirmation by the Banks' consultant that (b) (4) are sufficient over the life of the loans. • Perform further due diligence on the mismatch of (b) (4). • Conduct ongoing review of the financial model, making adjustments for project developments.
(b) (4)	<p>The 2014 Monitoring Plan of (b) (4) called for: "prepare an analysis of the likely impact on (b) (4) future financial condition by adjusting the model for possible higher than originally projected costs of purchasing a hedge on the remaining debt in 2017." The 2015 report did not state the result and the financial projections excluded a sensitivity analysis.</p>
(b) (4)	<p>According to the Board Memo, the DOJ was investigating (b) (4) for unrelated alleged acts of bribery pending since 2008;¹⁹ however, the Monitoring Plan excluded this investigation as a CRTI risk and no further due diligence was reported as conducted in the rating report.²⁰</p>
(b) (4)	<p>The following key Issues were cited in the Monitoring Plans of 2013 and 2014 but not evaluated in subsequent reports:</p> <ul style="list-style-type: none"> • In 2013, the Monitoring Plan required tracking (b) (4) plan to raise (b) (4), stating such an increase would significantly benefit the company. The 2014 Rating Report made no mention of the result or impact on the company, although unreferenced attachments affirmed that the plan was being tracked and that there had been no change in (b) (4) • In 2014, the Monitoring Plan included the close monitoring of the company's (b) (4) to improve productivity of the (b) (4). The 2015 rating report made no mention of the result or impact on the company, although unreferenced attachments affirmed that the plan was being tracked and that the status quo of (b) (4) had not changed.

Source: OIG observations from EXIM risk rating reports

¹⁸ According to EXIM Bank, these factors were or will be addressed as part of the scheduled timing pursuant to the transaction documentation requirements. For example, extensive due diligence on the (b) (4) was conducted in the latter half of 2015 as part of the Bank's multidivisional

(b) (4)

¹⁹ (b) (4)

²⁰ As part of the 2016 risk rating process, a CRTI review occurred on this transaction and (b) (4) was cleared through this review.

ACKNOWLEDGEMENTS

This report was prepared by Office of Inspections and Evaluations, Office of Inspector General for the Export-Import Bank of the United States. Several individuals contributed to this report including Donald Reid, Senior Inspector; Daniel Wong, Inspector; Jennifer Fain, Deputy AIGIE; and Mark Thorum, AIGIE.



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