Counterparty Risk Ratings Audit Report Report #6/16 August 29, 2016

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Introduction

In accordance with the 2016 Audit Plan, Internal Audit performed an audit of the counterparty risk rating process, for both reinsurance and treasury counterparties. Transactions with counterparties are intended to mitigate risks arising from market factors as well as exposure concentrations. Ratings for counterparties are based on an external ratings-based approach. Counterparty exposures are held with investment grade counterparties, with all exceptions authorized by EDC's Board of Directors.

Audit Objectives & Scope

The objective of the audit was to review the controls related to establishing and updating counterparty risk ratings and limits, counterparty collateral management, policies and procedures governing the counterparty risk rating process, and reporting of these transactions. The scope of this audit was to evaluate the design and operating effectiveness of controls related to establishing and updating risk ratings for treasury counterparties and reinsurance counterparties. The testing period for the audit was from April 1, 2015 to March 31, 2016.

Internal Audit Opinion

In our opinion, the Counterparty Risk Rating Process is "*Well Controlled*¹". Effective controls exist with respect to establishing and updating counterparty risk ratings and limits. Moderate issues were noted and are described in the section that follows. Management has agreed to implement the corrective actions no later than Q2 2017.

¹ Our standard audit opinions are as follows:

⁻ Strong Controls: Key controls are effectively designed and operating as intended. Best in class internal controls exist. Objectives of the audited process are most likely to be achieved.

⁻ Well Controlled: Key controls are effectively designed and operating as intended. Objectives of the audited process are likely to be achieved.

⁻ **Opportunities Exist to Improve Controls**: One or more key controls do not exist, are not designed properly or are not operating as intended. Objectives of the process may not be achieved. The financial and/or reputation impact to the audited process is more than inconsequential. <u>Timely action is required.</u>

Not Controlled: Multiple key controls do not exist, are not designed properly or are not operating as intended. Objectives of the
process are unlikely to be achieved. The financial and/or reputation impact to the audited process is material. <u>Action must follow
immediately</u>.

Audit Findings & Action Plans

1. Concentration of Work

The majority of the tasks within the counterparty risk rating process are concentrated in the role of a single individual. These activities include performing counterparty credit analysis, applying pre-approval criteria to new counterparty limits, the recording of ratings and limits, performing annual reviews, and reporting. A segregation of duties conflict arises when record keeping and authorizing functions are concentrated within a single role, resulting in an increased risk of undetected errors. In addition, an increased risk of business continuity arises if the responsible individual is unavailable. No errors were noted in the sample of transactions tested. Management has agreed to perform a review of areas where concentrations of work exist and to implement procedures to appropriately segregate conflicting duties.

Rating of Audit Finding - Moderate² Action Owner – Manager, Market Risk Due Date – Q2 2017

2. End User Computing Controls

End user computing applications refers to programs and tools that are generated by business users such as personal productivity tools and spreadsheets. Extensive use of end user applications introduces an element of risk as these tools are outside of the formal IT control environment. The market risk management team has developed a Spreadsheet tool for calculating whether collateral calls or returns are required. We noted a lack of end-user computing controls supporting this key tool. Specifically, improvements are needed to strengthen access controls, documentation, implementation of an independent validation process for the tool, and formal change management procedures. Without appropriate end user controls, the risk arises that insufficient collateral calls will be made. This risk is partially mitigated as a result of the investment grade nature of the portfolio, reducing the risk of counterparty defaults and resulting collateral calls, that are determined by the spreadsheet tool. Management has agreed to implement appropriate end user computing controls around the collateral calculation tool.

Rating of Audit Finding – Moderate Action Owner – Manager, Market Risk Due Date – Q2 2017

² The ratings of our audit findings are as follows:

Major: a key control does not exist, is poorly designed or is not operating as intended and the financial and/or reputation risk is
more than inconsequential. The process objective to which the control relates is unlikely to be achieved. Corrective action is
needed to ensure controls are cost effective and/or process objectives are achieved.

Moderate: a key control does not exist, is poorly designed or is not operating as intended and the financial and/or reputation
risk to the process is more than inconsequential. However, a compensating control exists. Corrective action is needed to avoid
sole reliance on compensating controls and/or ensure controls are cost-effective.

Minor: a weakness in the design and/or operation of a non-key process control. Ability to achieve process objectives is unlikely to be impacted. Corrective action is suggested to ensure controls are cost-effective.

3. Process Documentation

Management has implemented a number of policies and procedures to support the counterparty risk rating process, including the Counterparty Credit Risk Policy (the "Policy"), Delegation of Authority Appendix G-1, and procedures for both reinsurance and treasury counterparties. Although no errors were identified in the sample of transactions tested, it was noted that the procedures documents do not provide sufficient guidance with respect to thresholds for exercising professional judgment in the application of the Policy. While applying a certain amount of professional judgment is reasonable, without clearly defined parameters, the risk arises that this judgment will be inconsistently applied across counterparties with similar risk factors, thus reducing comparability between counterparties and the ratings assigned.

Another area noted where the procedures documents were not sufficiently elaborated, was in the documentation of the annual review process. The risk of inconsistent application of tools and processes for completing annual counterparty reviews increases when documentation of the process is incomplete. Documentation of the process also facilitates backups and guidance to new employees who may be required to participate in this process. Management has agreed to review policies and procedures to determine where professional judgment is expected to be applied, and will document appropriate thresholds in the reinsurance and treasury counterparty procedures documents. Management has also agreed to document the annual review process in the procedures documents to facilitate consistent and complete annual counterparty monitoring.

Rating of Audit Finding – Moderate Action Owner – Manager, Market Risk Due Date – Q2 2017

Conclusion

The audit findings have been communicated to and agreed by management, who has developed appropriate action plans.

We would like to thank management for their support throughout the audit.