Obligor Roll-Up & Credit Exposure Reporting Audit Report Report Nr. 14/15 September 10, 2015

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Introduction

As per our 2015 Audit Plan, Internal Audit performed an audit of the Obligor Roll-Up & Credit Exposure Reporting (Obligor Roll-Up) process. Obligor Roll-up refers to the process of identifying and classifying obligors under a Global Ultimate Parent (GUP). GUP identification facilitates aggregation of obligor exposures across all lines of business and is a key aspect in managing concentration risk. A web-based tool was implemented during 2015 for GUP aggregation and related reporting. This web-based tool replaces the existing Excel-based model that was used for this purpose.

Audit Objectives & Scope

The objective of this audit was to review controls surrounding Obligor Roll-Up and related processes including:

- ✓ Methodology for assigning a GUP and rolling up exposure;
- ✓ Reviews and approvals of the GUP;
- ✓ Management and Board reporting regarding the aggregation of obligor exposures (i.e. GUP reporting);
- ✓ Effectiveness of IT controls related to security and change management for the Web based tool and the underlying database.

The scope of the audit was to evaluate the design and operating effectiveness of the controls related to Obligor Roll-Up. Excluded from the scope of the audit was an assessment of the completeness and accuracy of the data in the source systems feeding the Web based tool and the risk weighting of exposures.

Internal Audit Opinion

In our opinion, "Opportunities Exist to Improve Controls" surrounding the identification of a GUP. There is a lack of a corporate policy addressing the topic of identifying a GUP, including matters such as: definition and identification criteria; roles and responsibilities; and approvals. In the absence of a corporate policy, separate guidelines for determining a GUP have been issued by three teams within EDC, which is inefficient and can lead to inconsistencies. We also found that these guidelines do not always

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>



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>

define the criteria for determining a GUP with enough granularity to ensure their consistent application. In order to help ensure consistency, a central team reviews GUP assignments made by the business and may override the original GUP assignment. We found that a significant number of GUP overrides are being performed by this team. While these overrides are generally for valid reasons, the authority to perform these overrides has not been formally assigned to the team and controls such as approvals and retention of supporting documentation are not in place. In addition, the credit authorization system for ARI buyers is not always being updated to reflect the GUP overrides made by the central team. Finally, we found that there was an absence of documentation surrounding the web-based tool regarding the development, testing and approval of the tool and any changes to it. Documentation governing the import and manipulation of exposure data has also not been developed. Given these control deficiencies, we performed substantive testing to verify the accuracy of GUP assignments. Although our sample size was not statistically valid, we only found errors in three of 25 GUP assignments. None of the errors were material. Management has developed action plans to address the audit findings.

Audit Findings & Action Plans

1. Policy & Guidance

EDC's existing policy framework does not address the topic of GUP, including the identification of GUP, aggregation of exposure under a single GUP and the limits related to GUPs. In addition, there are three documents detailing the methodology for assigning GUP. These documents are not supported by a Board-approved policy nor do they have Management's Risk Management Committee (MRMC) approval. In addition, having various documents detailing the same methodology is not efficient and can lead to inconsistencies. These procedures and guidelines also do not address, in adequate detail, certain key concepts necessary in ensuring appropriate GUP assignment. For instance, interdependence and future economic benefits are not clearly defined. We note that management is aware of the need for GUP reporting and has action plans in place to introduce GUP-based limits and Board reporting. As noted above, there needs to be a policy and detailed procedures addressing GUP identification and reporting in order to ensure the integrity of Board reporting. Management has agreed to create a policy for GUP, outlining roles and responsibilities, including approval authorities, and reporting requirements. A procedure document will also be created and this document will consolidate and replace the existing guidelines.

Rating of Audit Finding - Major²

Action Owner – Lorraine Audsley (Vice President, Risk Management Office) and David Stevenson (Vice President, Business Intelligence & Innovation)

Due Dates - All actions to be implemented by Q3, 2016.

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.



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.

2. Integrity of GUP Assignments

While GUP assignments are made within each line of business, a process is in place for the Web based tool team to review and approve GUPs for the purpose of the Web based tool. Where necessary, GUP overrides are made by the 360 team and appropriate GUPs are assigned. We were unable to verify evidence of the review and approval process prior to the uploading of GUP information to the Web based tool. Also, in the case where a GUP override is made by the 360 team, we could not verify the existence of any documented rules or other support for overrides. In addition, there is no formal document assigning the GUP override authority to the 360 team. The exposures related to GUPs assigned or over-ridden by the 360 team are statistically significant. Based on our review, exposure under GUP override by the 360 team represents 21% of overall exposure. We note that changing a GUP will also impact exposures. We performed substantive testing to verify the accuracy of GUP assignments. Although our sample size was not statistically valid, we found errors in three of 25 GUP assignments. None of the errors were material.

There is also no formal or consistent process in place to update the source systems based on changes to GUPs. For instance, if an override has been made by the 360 team to a GUP assigned in the insurance administration system, it will not be updated to reflect the change in the system, leading to a discrepancy in the GUP for the same obligor in the 360 tool and the insurance administration system. In other words, the insurance administration system will not have the correct GUP information, impacting decision making and accuracy of aggregated exposure in the system. Management has agreed to implement a formal process for approving GUP overrides and also put in place a process to update GUP overrides in source systems.

Rating of Audit Finding - Moderate

Action Owner – Lorraine Audsley (Vice President, Risk Management Office) and David Stevenson (Vice President, Business Intelligence & Innovation)

Due Dates - All actions to be implemented by Q2, 2016.

3. Web based tool System and Procedures Documentation

The Web based tool was implemented during 2015 and replaces the existing Excel-based model. It is available for users across EDC and is a centralized source of information regarding Obligor and GUP exposures. It will play an even more vital role in the near future as EDC moves towards GUP-based reporting to Management and the Board. Given the importance of the Web based tool, the existence and quality of system and procedures documentation is vital to the effectiveness of such reporting.

System documentation includes the application of specific features, business rules coded into the system, system testing, system migration approvals, and other such system development details. This facilitates standardized communication with all stakeholders and is also useful for documenting business processes. During our review, we found that there is an absence of system documentation regarding the development, testing, and migration approval of the Web based tool.

Key procedures performed as part of loading authorized GUP information onto the Web based tool include the following activities:



- Data import The Web based tool extracts data from various product application systems. Key
 aspects of the data extraction process include the list of source systems, data fields' extracted, data
 integrity checks, and other relevant information.
- Data Manipulation This refers to the process by which the Web based tool adjusts the exposure amounts for credit insurance (ARI) to reflect EDC's portion of the risk after coinsurance and reinsurance. This is known as "netting" of exposure amounts.
- Approval of data This refers to the process by which the Web based tool uses certified data from various source systems. Certification of data involves reconciling source data to the General Ledger and Financial Statements by the various product areas.

The procedures surrounding data import, data manipulation and data certification have not yet been documented and can result in inconsistencies.

Management has agreed to create system documentation outlining development activities, testing approach and system migration approval of the Web based tool. Procedures documentation will also be created describing the data import, manipulation and approval processes.

Rating of Audit Finding - Major Action Owner – Charles Cossette (Director, Analytics and Market Risk Management) Due Dates - All actions to be implemented by Q3, 2016.

4. Information Technology – Data Access Controls

During our review of the list of the Web based tool source files and paths, we noted that a process is not in place to update the list of authorized users to reflect the most current list of individuals who need to have access and type of access. As a result, system access is not always removed for employees leaving the organization or transferring to another department in EDC. Effective information security and access controls are important to ensure the integrity of data. Access to systems should be role-based and on a need to know basis to prevent errors and security breaches. Management has agreed to create a list of authorized users for the Web based tool data input files and also put in place a monthly review and approval process to ensure this list is current.

Rating of Audit Finding - Moderate

Action Owner – Charles Cossette (Director, Analytics and Market Risk Management)

Due Dates - All actions to be implemented by Q4, 2015

Conclusion

The audit findings have been communicated to and agreed by management, who has developed action plans that are scheduled for implementation no later than Q3 2016.

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

