Credit Analysis & Pricing Audit: International Financing Direct Final Report Report Nr. 17/15 December 8, 2015

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Introduction

As per our 2015 Audit Plan, Internal Audit performed an audit of transactional credit analysis, pricing, structuring and DOA activities within the International Financing Direct (IFD) underwriting process. EDC's IFD group coordinates and executes credit granting and underwriting aligned to Commercial Markets and Small Business companies ($0M-$300M in sales) that have international expansion plans through growing international sales or making investments in foreign operations. IFD provides financing support to exporters ranging from working capital financing to support export sales through to financing capital expenditures for international acquisition or expansion of Canadian companies.

In the past year the IFD team has facilitated 37 financing transactions amounting to approximately $400M in funding. The IFD portfolio exposure was $840M as at June 30, 2015.

Audit Objectives & Scope

The overall objectives of this audit were to review the controls pertaining to:

- ✓ Transactional credit analysis, pricing, structure, and DOA; and
- ✓ The SME Scorecard and its use in determining obligor ratings which was implemented in January 2015 as a replacement for RiskCalc.

The scope of the audit included an evaluation of both the design and operating effectiveness of the related controls. Transactional testing related to credit analysis, pricing, structure and DOA covered the period from July 2014 through the end of June 2015. Testing relating to the use of the SME Scorecard for determining obligor risk rating covered the period January 2015 through June 2015.

Internal Audit Opinion

In our opinion, ***"Opportunities Exist to Improve Controls"***[1] with respect to transactional credit analysis and the establishment of obligor risk ratings within the IFD underwriting process. IFD underwriting guidelines exist but do not always provide detailed guidance on matters such as specific financial statement balances that should be included or excluded from individual ratios. In addition, a standardized tool with built-in ratios and financial statement components is being developed but has not yet been implemented for use by the underwriters. As a result, we found a number of inconsistencies in how financial ratios were calculated. Examples include the exclusion of off-balance sheet items such as operating lease commitments and guarantees, and including intangible amounts in TNW (tangible net worth) calculations. We also noted that financial projections were not always performed and rationale was

[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. Timely action is required.
- **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. Action must follow immediately.

not documented. Although these inconsistencies were frequent, it is unlikely that they would have impacted the final credit decision.

The SME Scorecard model was implemented in January 2015 and is used to establish risk ratings for approximately $1.6 B of small business exposure across a number of programs including EGP, CIB and IFD. The model was developed by S&P and is designed to generate risk ratings based on both qualitative and quantitative factors. However, given the difficulty in gathering the information needed to provide credible answers to the qualitative factors, a corporate decision was made to omit this portion of the model. A neutral answer is given for each qualitative factor so that ratings are based solely on the quantitative factors. The SME scorecard, including this design adjustment, has not been subject to an independent validation process. We also found that the calculation of financial ratios used in the SME Scorecard model is not always being done consistently with the corresponding S&P guidance manual, especially with regard to normalization adjustments that need to be made to the obligor's financial statements. Finally, due to system limitations, deal documentation is stored in multiple locations (C3, MBC, and team network drive). As a result, finding deal documentation was challenging. Management has developed detailed action plans to address the issues raised in the audit which will be implemented no later than Q4 2016.

Audit Findings & Action Plans

Finding #1 – SME Scorecard Probability of Default (PD) Rating Application

The SME Scorecard is a credit rating application used by EDC for obtaining PD ratings for small business transactions. Total small business exposure is approximately $1.5B which includes about $75M of IFD exposure. The SME Scorecard is an off–the-shelf application purchased from S&P and was implemented in January 2015 as a replacement for RiskCalc. During the audit we noted the following issues pertaining to the SME Scorecard:

- ✓ ***Independent Validation:*** The SME scorecard ratings and methodology were validated internally by RMO, mainly by comparing PD ratings generated by the SME Scorecard to RiskCalc and FACT ratings. We found that that no independent validation was performed at the time of implementation and also there is no process for ongoing independent validation. By design, the SME Scorecard includes both qualitative and quantitative factors for determining PD ratings. However, we understand that it is difficult to obtain the information needed to score the qualitative factors and as a result this part of the model is not being used. (A neutral score is assigned to all qualitative factors so as not to influence the PD rating.) Model validation would provide assurance that the resulting PD ratings remain valid even though a portion of the scoring methodology is not being used.

- ✓ ***Financial Inputs:*** In order to obtain a PD rating for an obligor, certain financial ratios are calculated based on the underwriters input of financial components. We found that the approach followed to calculate ratios was inconsistent with the methodology provided in the S&P manual for the SME Scorecard. For example in three of the four transactions tested, we noted inconsistencies in calculating the current portion of long-term debt due to the exclusion of off-balance sheet items and deferred tax liabilities and not including FX gains/losses in other income. The primary root cause for some of these inconsistencies is that the existing SME Scorecard user guide does not fully encompass all requirements for financial adjustments and does not use the definition of ratios that are outlined in the S&P manual. Our transaction testing did not indicate any material issues with regards to the PD rating obtained from the SME Scorecard.

- ✓ ***EDC's IRB Risk Rating Methodology:*** The IRB Methodology provides guiding principles that apply to the risk rating of EDC obligors and transactions. We noted that the latest version of this document is not updated for the newly adopted SME Scorecard application and includes references to the decommissioned RiskCalc application. Also, the methodology is silent about neutralizing the impact of the qualitative part of the SME Scorecard analysis. Finally, the document includes references to the CMF (Commercial Market Financing) line of business which no longer exists.

Management has agreed to develop a plan for the independent validation of the SME Scorecard. In addition, the S&P manual for the SME Scorecard will be made available to the underwriters through a series of training sessions and EDC's IRB Risk Rating Methodology will be updated to reflect terms and conditions of the SME Scorecard.

Rating of Audit Finding - Major[2]
Action Owner – Yves L'Heureux (Director, Credit Risk Management)
Due Dates - All actions to be implemented by Q4, 2016.

Finding #2 – Transactional Credit Analysis

The credit analysis presented in the Credit Paper for IFD transactions contains a set of current and projected financial ratios calculated using the obligor's financial statements. During our testing we noted that the operational guidelines, detailing how to calculate financial ratios, do not exist. As a result we found a number of errors in our testing sample. For example, tangible net worth was not calculated against the standard in the SME Scorecard manual for two deals as intangible amounts were included in error. In addition, we found that total liabilities did not include off-balance sheet items such as lease, purchase commitments, and guarantees in four deals. The discrepancies noted in our samples did not result in a significant impact on the ratios and therefore may not impact the credit granting decision. However, given the importance and systemic nature of the financial analysis process, we have recommended actions be taken to prevent the possibility of more significant impacts in the future. Management has agreed to update and authorize the existing IFD underwriting document to include standard definitions in the guidelines for calculating financial ratios as well as all relevant adjustments. Also, it was agreed that the Excel–based tool encompassing standard formulas and definitions that is under development will be implemented to help ensure more consistent transactional credit analysis.

[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.

Rating of Audit Finding - Major
Action Owner – Dan Mancuso (Vice-President, International Financing, Small & Mid Market)
Due Dates - All actions to be implemented by Q2, 2016.

Finding #3 – Security Valuation

IFD financing is normally provided through a senior debt transaction with security interest being first or second ranking. The security valuation approach for IFD deals generally varies from deal to deal given diversity of the security type and geographical location of the security. We noted that security valuation reports were prepared by the appraiser that the borrower or borrower's bank provided. While it is not practical for IFD to use a list of pre-approved appraisers due to the number of unique markets they lend into, complete reliance on external appraisers can result in overstated valuations being undetected. We were informed that reasonability assessments for the security valuations are performed by the underwriting team but not formally documented. Management has agreed to explore opportunities to create a standardized methodology to assess foreign market security appraisers.

Rating of Audit Finding - Moderate
Action Owner – Dan Mancuso (Vice-President, International Financing, Small & Mid Market)
Due Dates - All actions to be implemented by Q1, 2016.

Finding #4 – Document Retention

During the IFD underwriting process a variety of documents are created, reviewed, approved, and retained for future reference in the relevant systems (C3, MBC and team network drive). During our testing we noted that in many cases the process of file retention was incomplete. IFD underwriting guidelines require that certain deal related documents be saved in MBC which was not consistently followed. For instance, for seven of the 12 deals tested, we had to request a variety of documents including Letter of Offer, Financial Statements, PD rating and RAP report as they were not saved in MBC as required. IFD document retention on the L Drive is governed by IFD underwriting guidelines; however, these are not consistently followed and do not contain controls to ensure compliance. This results in transactional documents not being consistently retained to established standards. It is important that IFD working papers and documents that contain conclusions, endorsement, analyses, and approvals are retained. This could impact the quality of information available to teams such as Legal and Asset Management for future customer decisions and in situations where EDC deals with the obligor on a recurring basis throughout the life of the loan. Management has agreed to reinforce the standards for transactional file structure on the L drive. In addition, the feasibility of implementing a deal file completion checklist will be examined.

Rating of Audit Finding - Moderate
Action Owner – Dan Mancuso (Vice-President, International Financing, Small & Mid Market)
Due Dates - All actions to be implemented by Q2, 2016.

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 Q4 2016.

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