DIRECTED RISK RESEARCH PROBLEM STATEMENT

Risk Theme	Credit Risk – Regulatory model: PD for corporate portfolios	**Problem Nr.**	PS15012

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PROJECT TITLE: Low default portfolios – estimation of the probability of default.

PROJECT GOAL

The goal of this project is to justify the value used for the confidence level γ in the Pluto and Tasche (2006) low default methodology.

HIGH LEVEL DESCRIPTION OF PROBLEM

Low default portfolios are especially relevant in the corporate credit risk space. Basel regulations make specific mention of so-called low default portfolios (LDP), see the Basel Committee Newsletter No. 6 (2005).

Often the Pluto and Tasche (2006) methodology is used to estimate the "most prudent" probability of defaults (PDs) at a certain confidence level.

Pluto and Tasche recommended the use of a confidence level approach, dependent on a confidence level γ. To a large degree, the estimation of the PD is transferred to the choice of γ. So, the methodology says the PDs cannot be estimated, but choosing a value for γ, the most prudent PDs can be estimated. No explicit guidance is given on the choice of γ. The aim of this project will be to do some explicit statistical work to guide banks in the choice of γ.

PROJECT OBJECTIVES

The objectives of this project are:

- to determine the appropriate level of the confidence level γ; and
- to write a document, which can be submitted to the SARB, showing the analysis done.

OUTPUTS REQUIRED

- A paper that assesses the statistical justification of the choice of γ.

STRATEGIC VALUE TO DIRECTED RISK RESEARCH

This project will contribute to the whole banking society and ease the use of the Pluto and Tasche methodology for LDPs.

BIBLIOGRAPHY

Pluto K. and D. Tasche, (2006), "Estimating probabilities of default for low default portfolios." In: Engelmann B, Rauhmeier R (eds). *The Basel II risk parameters*. Springer. Berlin.