**PROJECT TITLE:** Practical approaches to perform Macro-Economic Stress Testing for Operational Risk

**PROJECT GOAL**
Determine if quantitative techniques can be used to perform Macro-Economic Stress testing in respect of Operational Risk, for example whether there exists a causal link between macro-economic factors and operational losses that can be used to construct a model. Determine if expert-based approaches are justifiable including the practical implementation thereof.

**HIGH LEVEL DESCRIPTION OF PROBLEM**
For the requirements such as the regulatory-mandated Internal Capital Adequacy Assessment Process (ICAAP) and financial budgeting, banks perform periodic macro-economic stress tests. This entails the evaluation of the impact on operational risk (OR) capital and expected losses due to a number of macro-economic stress scenarios for different forecasting horizons. A typical approach used for credit risk is to assume a causal relationship between the macro economy and credit losses. Statistical regression models are then used to determine the relationship between historical losses and key macro-economic factors such as GDP, inflation and interest rates. Due to an apparent tenuous causal link between operational risk and the economy, can the above approach be extended to operational risk in a valid way, or are there other approaches that are more appropriate, including expert-based approaches?

**PROJECT OBJECTIVES**
Provide a practical approach to perform macro-economic stress testing for operational risk.

**OUTPUTS REQUIRED**
- A documented specification of a modelling approach to use for operational-risk macro-economic stress testing.
- Publication of the outcome in a perceived credible publication in order to influence other banks and the regulator in order to improve consistency of approaches.

**STRATEGIC VALUE TO DIRECTED RISK RESEARCH**
To be completed

**POTENTIAL PITFALLS**
To find quality operational loss data might pose a challenge.
REFERENCES


