JOSEPH TAGNE, Ph.D., FRM
Risk Manager and Quantitative Advisor

PROFILE

As a Quantitative professional with 12+ years of experience in quantitative research, Insurance and Risk Management. I have a strong ability to convert business requirement into mathematical formulation to support the organization needs. I have a proven track record expertise leading and delivering complex modelling projects in the following areas:

- Credit and Market Risk Models (ECL, Capital, PD, LGD, EAD, Stress Testing, VAR/ES)
- Model Governance and Model Risk Management
- Financial Modelling (Fixed income, Equity and Derivatives valuation)
- Data Science and Machine Learning (linear model, logistic, survival, decision trees, supervised and unsupervised learning, time series, etc.)
- Economics Analysis
- Advanced computer and programming skills (R, SAS, VBA, MATLAB)
- Strong problem solving and analytical skills
- Client Focus Reporting (Executive, Technical)
- Bilingual (French, English)
- Continuous Improvement.

Certifications: FRM – Certified by the Global Association of Risk Professionals.
The Data Scientist's Toolbox – Coursera
Credit Scorecard Development and Implementation - SAS
P exam – SOA/CAS

WORK EXPERIENCE

Principal Economist – Financial Institution   June 2020 - Present
Bank of Canada, Ottawa, Canada
As a knowledge expert,
- Leading and conducting analysis and research and providing policy advice regarding vulnerabilities and risks associated with financial institutions.
- Analyzing trends and developments in the sectors that the division monitors and help improve the analytical tools and framework.

- Providing leadership in the division's assessment of vulnerabilities and risks, drawing reasoned conclusions from the analytical work of the division and helping improve the communication and reporting of our assessment to key stake holders.
- Developing relationships with experts across the Bank, domestic agencies, international bodies, and private sector to enhance collaborations and make progress on the department priorities.
- Proactive in suggesting, leading and conducting original, high-quality policy-relevant research and analysis.
- Coach others and playing a key role in the development of the divisional workplan.

Senior Advisor – Model Risk Management   Apr 2018 – May 2020
EDC, Ottawa, Canada
- Led the validation of several corporate Models (ECL, Capital demand, Aircraft LGD, Corporate PD and LGD, Lease Co PD, SME PD, IFRS 9 PD Curve, Sovereign and GRE LGD).
- Conducted independent end-to-end validation of a variety of Models employed across the company (credit and market risk models i.e. PD, LGD, EAD, VaR, EL, etc.).
- Identified key risks associated with a Model, planning a risk-based validation approach and scope.
- Proposed appropriate mitigation plan for identified Model risk.
- Designed, implemented and conducted validation tests, identifying gaps in Model governance, and drafting a Model Validation report.
- Researched and reviewed external best practices, regulatory requirements (BASEL, IFRS 9), and the organization's risk appetite.
- Assessed Model Materiality with benchmark against regulatory threshold.
- Provided effective response to internal/external audit in timely manner.
- Established, maintained and monitored principles, practices, processes and standards for Model Governance.
- Managed external engagements (request for proposal, selection of vendors and project management).
- Supervised, Developed and Coached junior staff.

Senior Quantitative Analyst   March 2015- Apr 2018
CMHC, Ottawa, Canada
- Developed model specifications, performing model calibration, model updates/refresh, backtesting and model validation.
- Maintained specialized expertise in state of the art mathematical, statistical and econometric techniques to develop best-in-class risk, capital and stress testing models.
- Proposed and implemented new PD, LGD and EAD models in the areas of insurance, investment and securitization for capital requirements estimation.

- Development, monitoring and updating of internal loss models (PD, LGD, EAD) and pricing models.
- Conduct risk, financial, sensitivity and pricing analyses and researches to inform and support business and strategic positions or recommendations.
- Ensured appropriate documentation and maintenance for all models.
- Ensured proper model governance.
- Initiated internal model validation group before submission to model vetting team.
- Presented model's outcome to management and potential users.
- Developed/coached junior staff.

Quantitative Advisor   2014- 2015
One Drop, Montreal, Canada
- Proposed a survey sampling methodology for data collection
- Analyzed data and provided key insights with SPSS
- Provided an appropriate documentation

Quantitative Advisor   2013
HEC, Montreal, Canada
- Revised audit sampling guide for CGA Canada
- Provided a VBA application for illustration
- Documented revision

Lecturer /Teaching assistant   2010 –
2015
University of Montreal, Montreal, Canada
- Taught Econometrics/forecasting to advanced undergraduate student
- Delivered lecture notes in statistics to human's sciences student
- Trained undergraduate student in statistical software such as SAS and R
- Provided positive and constructive feedback to student

Sr. Statistician / Economist   2008 -
2010
Ministry of economics, Cameroon Rep.
- Used machine learning and regression techniques to give advice to executive
- Macroeconomics modelling (Commodities' price fluctuation, poverty analysis)
- Data collection, Imputation and Inference
- Trained local staff in data analysis with SPSS software

EDUCATION

PhD Statistics
2016
University of Montreal, Montreal, Canada

MSc Economics
2010
Equivalence delivered by MICC – Quebec

MSc Mathematics
2008
Equivalence delivered by MICC – Quebec

SELECTED PUBLICATIONS

"Estimating the mean and its effects on Neyman smooth tests of normality for ARMA models" Jul 6, 2016. The Canadian Journal of Statistics 44, pp. 241-270.

PhD dissertation Topic   2011 - 2015

- On smooth test of goodness of fit for vector time series process with application to Canadian macroeconomics data and global temperature. One published paper and two papers are under review for publication

Speakers

- CMHC, EDC (2015 - present)
- ASA / SSC (2013 - 2015)

PROFESSIONAL MEMBERSHIP

Global Association of Risk Professionals (GARP) – FRM Program Contributor