Ivan Samkov, FRM

MBA, MEcon, MEng | Financial Risk Manager | Market Risk / Quantitative Research

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✉ ivan@samkov.com   in linkedin.com/in/isamkov   ⊙ Location: Toronto, Canada

Certified Financial Risk Manager (FRM) with experience in development and implementation of risk models and policies, financial products. Expertise in market risk analysis (derivatives, equities, FX, fixed income), derivative valuation, portfolio risk, and business systems analysis for risk management.

Financial Risk Management: market, credit, and operational risk. Model development, system analytics, UAT testing.
Data analysis and visualization: statistical and ML modeling, exploratory data analysis, report dashboard developing.

- Expert proficiency: **Excel, VBA, SQL, Bloomberg Terminal, Tableau, CSS/HTML/PHP.**
- Intermediate proficiency: **Python, MATLAB.**
- Basic proficiency: **SAS, R, JavaScript.**

Education

Schulich School of Business, York University (*Toronto, Canada*), Sep 2021 – May 2023, **MBA**: *Financial Engineering and Risk Management (Stochastic Calculus in Finance, Numerical Methods, Derivative Securities, Fixed Income, Risk Management in Financial Services, Applications of Data Science)*

Higher School of Economics (HSE) (*Moscow, Russia*), Sep 2010 – Jun 2012, **Master of Economics**: *Finance*

National Research Nuclear University (*Moscow, Russia*), Sep 2003 – Feb 2009, **Master in Engineering Physics**

Certification and training:

- *Applied Data Science Lab*, WorldQuant University (2023)
- *SAS Programming 1*, SAS (2023)
- *Financial Risk Manager (FRM)*, Global Association of Risk Professionals, GARP (2018)
- *Intermediate R for Finance*, DataCamp (2018)
- *Financial Engineering and Risk Management*, Coursera (2016)

Recent Professional Experience

Finam (*retail brokerage and investment company with ~300k client accounts*)

Head of Risk Management Methodology   *Jul 2019 – present*

Lead the implementation of regulatory requirement changes for initial margin calculation:

- Analyzed how the changes would affect existing models and regulatory risks
- Reassessed and updated existing portfolio risk models to satisfy new regulatory requirements

Co-lead development risk assessment model for portfolios with options:

- Development of formulas and calculation algorithm
- Followed through the implementation of the model into the internal Risk Management tool

Core contributor in the methodology design of derivatives' regulatory requirements for the U.S.-based branch:

- Analyzed Reg T & FINRA requirements and option-trading levels for client portfolios
- Prepared the methodology for margin calculation
- Guided trading platform development team in the implementation and testing of the model

Designed the market-risk scenario-based stress testing tools:

- Prepared the risk historical market scenarios and reversed stress-testing scenarios
- Automated the client portfolio stress testing for quarterly and daily basis tests (*Excel, VBA, OLAP*)
- Resulted in improved exposure identification

Continuously designed improvements to the internal online Risk Management tool (business system analysis, requirements development, end-user testing):

- Lead risk-metric visualization for client portfolios, automation of market and regulatory risk management, UI/UX improvements, implementation of new products and services
- Lead improvements for limit synchronization with trading platforms and the back-office databases

Continuously revised and improved internal methodologies and documentation (enterprise risk management framework, market, credit, and operational risks).

Finam *(retail brokerage and investment company with ~300k client accounts)* | *Moscow, Russia*

Financial Risk Manager   *Sep 2014 – Jul 2019*

Client portfolios monitoring and control:

- Daily margin-call execution for client portfolios
- Developed and followed through the implementation of automated computation of the client margin-call position closing. Significantly reduced the time needed for client account processing (average time for margin call execution reduced from 2 minutes to 30 sec)
- Operational control for OTC trades (trade confirmation, daily margin requirements, collateral monitoring).

Portfolio risk analysis improvements:

- Designed a system for Monte-Carlo simulation for derivatives' portfolio (*Python, Excel*)
- Standardized the performance-and-risk analysis of active trading strategies and trading projects
- Analyzed and reported projects' VaR/Expected Shortfall results and performance metrics (*VBA, Excel*)

Trading instruments' management improvements:

- Automated historical market data extraction and processing (*Bloomberg, VBA, Excel*)
- Designed and implemented the model for trading instruments' market risk calculation and backtesting (based on instrument EWMA VaR, historical VaR, and liquidity risk) for clients' initial margin risk rates optimization (*VBA, Excel*)
- Developed and implemented the tool for news monitoring: exchange, regulatory, and corporate news that impact traded instruments (*Python*). Reduced the news processing time from 0.5 hours to several minutes.

Implemented the counterparty credit risk scoring model based on Moody's KMV and financial statement ratios (*VBA, Excel*).
Initiated the creation of a structured internal wiki knowledge base for the risk department.

Volunteer Experience

- **Contributing author to FRM exam,** Global Association of Risk Professionals (GARP), 2019
- **Web developer for IELTS-preparation service**: PHP & JavaScript backend and frontend, 2020

Languages

English (advanced) | **Russian** (native) | **Spanish** (basic)