

## Summary

- Senior portfolio strategist and quant researcher with 12+ years of experience across leading global institutions (GIC, ADIA, IMF, ECB).
  - Specialized in portfolio construction, systematic asset allocation, and macro trading strategies.
  - Proven track record in integrating quantitative research with discretionary judgment to generate alpha and manage multi-asset portfolios.

## Professional Experience

**GIC** Lead Strategist, Senior Vice-President, Asset Allocation and Global Macro Singapore, since 2023

- Develop and deploy quant models for asset allocation, portfolio construction and risk management.
    - Contributed to >100 bn AUM portfolio construction across GIC fixed income and multi-assets books.
    - Implementation of overlays and hedging solutions, increased diversification and drawdown control
  - Manage a team of 5 quants covering DM/EM rates, FX, commodities and portfolio construction.

**ADIA** Quant Researcher, Asset Allocation and Global Macro Abu Dhabi, 2022-2023

- Developed and backtested systematic macro signals for fixed income and cross-asset strategies, directly informing ADIA CIO's strategic and tactical allocation calls.
  - Quant signals on rates, FX and commodities strategies.

**International Monetary Fund** Macroeconomist Washington DC, 2016-2022

- International macroeconomist, led macro modeling and forecasting missions for >30 economies, shaping policy and investment frameworks for central banks

European Central Bank Portfolio Manager and Market Operations Expert Frankfurt, 2013-2016

- DG Market Operations, FX reserves management and ECB QE implementation.

Education

Ph.D. Quantitative Macro & Finance, Peking University & EHESS

Beijing 2013

*Entire curriculum completed in Chinese Mandarin in Beijing.*

M.Sc. Quantitative Macro & Finance, Ecole Normale Supérieure de Paris-Saclay

Paris 2009

*First-ranked at France's national entrance exam (Normalien).*

M.Sc. Mathematics and Statistics, ENSAE Paris

Paris 2007

Undergrad (CPGE) Henri IV

## Open Source Python Packages

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- Distributional GARCH model to design VaR-based FX Interventions for Central Banks, [varfxi](#) repo
- Density Forecasting for Macro Variables, [gar](#) repo
- Conditional Density Projection via Quantile Regressions, Resampling and Multifit Models, [quantproj](#) repo
- Robust Density Estimation via Over-Parametrized Gaussian Skewed Models, [robustdensity](#) repo
- Partial Least Squares Wrapper for Data Reduction based on Scikit, [plswrapper](#) repo
- Quantile Spacing - solving for quantile crossing, from Schmidt and Zhu (2016), [quantilespacing](#) repo
- Quantile Local Projections, [quantileproj](#) repo
- Granular Instrumental Variables - from Gabaix and Koijen (2020), [granulariv](#) repo
- Cluster Analysis Wrapper with Performance Metrics and Visualization Tools, [clusterwrapper](#) repo

## Academic Research

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- *Financial Conditions in Europe: Dynamics, Drivers, and Macroeconomic Implications*, IMF WP (2024)
- *Technology and the Geography of FX Markets*, Journal of International Money and Finance (2023)
- *FX Interventions: A Risk-Based Framework*, IMF WP (2020)
- *Predictive Density for Global Growth*, IMF WP (2020)
- *Growth at Risk: Applications in IMF Surveillance*, IMF WP (2019)
- *Can Countries Manage Their Financial Conditions Amid Globalization?*, IMF WP (2018)
- *Trading Without a View: Fast Trading, Entropy and Underreaction in the FX Market*, ECB WP (2018)
- *Thick vs. Thin-Skinned: Technology, News, and Financial Market Reaction*, IMF WP (2016)
- *Household Savings in China : The Role of the Housing Market and Borrowing Constraints*, BdF WP (2014)

## Policy Publications

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- *United Arab Emirates: TA Report - Liquidity Management and Forecasting*: IMF TA report (2022)
- *Jordan: TA Report - Forecasting Framework for Currency in Circulation*: IMF TA Report (2022)
- *House Price Synchronization: What Role for Financial Factors?*: IMF GFSR (2018)
- *Financial Conditions and Growth at Risk*: IMF GFSR (2017)
- *High-Frequency Trading, Information and Market Volatility: the Role of Dark Pools*: ECB FSR (2017)
- *The Role of Currency Invoicing for the Transmission of Exchange Rate Movements*: ECB IRE (2015)

## Skills

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- **Languages:** Chinese Mandarin (conversational), English (fluent), French (native)
- **Analytics:** Optimization, statistical simulation and inference, machine learning and LLM
- **Programming:** Python (quant libraries, CI/CD, AWS deployment), SQL, R
- **Data:** Standard (Bloomberg, Macrobond, Wind, etc.) and alternative data

## IMF Country Missions

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I have been sent to more than 30 countries to contribute to IMF program negotiations, Article IV, FSAP, technical assistance missions, etc.

- **Mauritania:** monetary operations (2023)
- **Bosnia:** FX management (mission chief, 2022)
- **Burundi:** monetary operations (2022)
- **Algeria:** monetary operations (mission chief, 2022)
- **United Arab Emirates:** monetary operations (co-mission chief, 2021)
- **Namibia:** liquidity forecasting (mission chief, 2021)
- **Jordan:** liquidity forecasting (mission chief, 2021)
- **Djibouti:** liquidity forecasting (mission chief, 2021)
- **Hong Kong SAR:** FSAP, systemic liquidity and stress-testing (2021)
- **WAEMU:** FSAP, stress-testing (2021)
- **D.R Congo:** IMF program negotiations (2020)
- **Tunisia:** liquidity forecasting (2020)
- **South Korea:** FX reserves management (2020)
- **Morocco:** FX interventions (2020)
- **P.R China:** Risk modeling (mission chief, 2019)
- **India:** Financial modeling (2019)
- **Philippines:** Financial modeling (2019)
- **Malaysia:** Financial modeling (2019)
- **Singapore:** Financial modeling (2019)
- **Israel:** IMF Article IV, external sector (2019)
- **Albania:** IMF Article IV and post-program (2018, 2019)
- **Peru:** FSAP, systemic liquidity and stress-testing (2017, 2018)
- **P.R China:** ECB negotiations, RMB Eurosystem portfolio (2015)

## Teaching

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I taught financial modeling and financial operations to countries officials and central bankers around the world, often via IMF technical assistance centers.

- **Singapore:** [FX Intervention Rules](#) (2023)
- **Singapore:** liquidity forecasting (2022)
- **Ghana:** liquidity forecasting (2022)
- **Kuwait:** liquidity forecasting (2021, 2022)
- **Slovenia:** liquidity forecasting (2022)
- **IMF Washington DC:** density modeling (2021)
- **Kazakhstan:** liquidity forecasting (2021)
- **Guatemala:** liquidity forecasting (2021)
- **Austria:** density modeling (2021)
- **Malaysia:** density modeling (2020)
- **IMF Washington DC:** Python (2019)
- **Sciences Po and ENSAE Paris:** Econometrics and macroeconomics (2010-2012)