



Geometric Progression

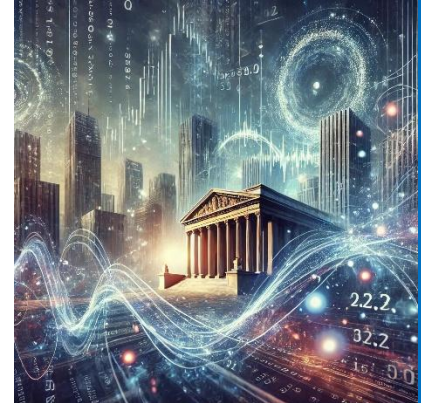
We Bring AI to Reality.

Understanding ZARONIA

– A Detailed Overview for Existing Market Professionals in 1 day.

The South African financial landscape is evolving and with the transition from JIBAR to ZARONIA, market participants must be equipped with the knowledge and practical skills to adapt seamlessly.

This **one-day intensive course** is designed specifically for financial professionals, traders, risk managers, analysts, compliance etc who need to understand the mechanics, implications and applications of ZARONIA in financial markets.



Course Highlights:

- Gain a **comprehensive understanding** of ZARONIA and global benchmark rate reforms.
- Explore the **key differences** between LIBOR, JIBAR, EURIBOR versus SONIA, SOFR and ZARONIA.
- Learn how **ZARONIA-linked instruments and derivatives** function in practice in plain English.
- Understand the impact on **pricing, valuation and Curves of the implementation**.
- Work through **real-world examples** of ZARONIA-based floating rate loans and derivatives.

[Please refer to the attached detailed agenda for more information.](#)

Level	This course assumes delegates are already familiar with the existing JIBAR based products. If you only know one of the products (e.g. a JIBAR based loan) you will still benefit from the course. Refer to the detailed agenda to see the complete breakdown. The course includes the fundamental calculations which are broken down systematically and simplistically.
Duration	1 Day in-house or 2 Days of 4 hours (including breaks) online.

Tutor: Mark Raffaelli

Mark is obtained his CFA Charter in 2000 and became fellow member of the Global Association of Risk Professionals (FRM) in 2001. Mark's extensive experience includes:

- Trading in Spot & Derivative Products professionally.
- Development of quantitative financial models for Surveillance, Performance Attribution, Price Validation, Price Models, Risk and Automation.
- Developments of Apps for the investment and insurance industry.
- Applying Machine Learning and Deep Learning using Sklearn, Tensorflow & Pytorch in Financial Markets for Banks, Asset Managers, and businesses.
- Conducting Time Series Analysis, Regime Change and Optimization with and without AI.
- Strategic implementation of AI and development of "Agentic" solutions.

Mark has also contributed to the South African Bond Markets by writing some of the pricing and curve specifications for financial instruments such as Floating Rate Notes (FRNs) and Inflation-Linked Bonds (ILBs) which are still in use today. He participated on the Quant Committee for indices and curves, further solidifying his expertise in this space.

Those who have attended Mark's courses will know about his passion and ability to cut through jargon, simplify technical issues and provide real life examples.



Detailed Agenda

1. The Background to the development of Zaronia and Reference Rates.

- Understanding LIBOR.
- The collapse of LIBOR.
- SONIA versus SOFR versus EURIBOR (and others).
- Understanding JIBAR and of the move to ZARONIA.
- Other SARB reference rates.

2. The Jargon of Zaronia and Overnight Index Averages with examples

- Business days and “following” conventions.
- A brief look at yield spreads and the foundation “spread” jargon.
- A detailed look at the derivation of ZARONIA.
- Terms rates versus overnight rates.
- Moving from an overnight rate to a backward-looking term rate
 - The Annualized Cumulative Floating Rate (ACFR) with simple examples.
 - Why the Arithmetic rate is wrong.
 - Deriving the Capitalization Factor and understanding the notation.
- Example differences of a 1month deposit using JIBAR versus ZARONIA.
- Understanding ZARONIA linked floating rate loans:
 - Lookbacks and Calculation Lags.
 - Observation shifts
 - Contrasting Lookback with and without Observation shift.
 - Floors
 - Credit Adjustment Spreads.
 - Calculation of Accrued Interest.
- Using an Example of a Floating rate money market instrument.

3. Zaronia FRN's

- Contrast of a JIBAR based FRN with the of ZARONIA.
- Accrued interest calcs with Books Closed Dates.
- Pricing / Valuation of FRN's under ZARONIA.

4. Some KEY ZARONIA Derivatives

- Traditional OIS versus ZARONIA OIS with examples.
- Traditional FRA's versus a Forward Starting Single period ZARONIA Swap.
- Traditional Interest Rate Swap versus a Spot Starting Multi Period Overnight Indexed SWAP (i.e. ZARONIA SWAP replacement).
- Cross Currency SWAP and FX SWAPS versus Zaronia Non-interbank USDZAR cross-currency basis swaps

5. Implications of ZARONIA

- System implications, yield curve implications and other implications.
- Strengths, Weaknesses and Risks associated with implementing ZARONIA.
- Wrap up and going forward.