Overview

As a global insurance company, Aegon’s core economic business evolves around Asset Liability Management (ALM) and the economic modelling framework that supports it. The insurance business at its core is liable for any potential cash flow pay outs to its policy holders. Their actuarial modelling systems aim to project these future liabilities and fully model their market dynamics to manage and hedge the Group’s future risk the Asset Management Division has to allocate their assets diligently against these liability benchmarks and model any market discrepancies carefully.

The Economic Scenario Generator (ESG) is designed to simulate all possible future market dynamics necessary to model the liabilities and the asset-classes that will best hedge them. It therefore requires all current and historical time series of market data input (e.g. interest rate term structures, swaps, swaptions, FX-rates, vol-surfaces, bond-returns, equity-returns, etc.) to simulate these potential liabilities and asset exposures.

Previous State

Prior to selecting Alveo’s platform, Aegon’s different actuarial teams, risk teams, asset management teams and regulatory reporting teams were all modelling and handling pieces of the data separately and had individual responsibility for sourcing, cleansing, validating and delivering financial data to downstream applications.

Alveo Benefits

Alveo empowered Aegon to create an entire global high-quality market data infrastructure to increase speed, efficiency and reduce risk in the pricing and valuation process for insurance assets and liabilities. It has currently FX rates, indices, yield curves, volatility surfaces and correlation matrices in order to value historical time-series that in turn feed into the ESG as well as to the different applications that the separate teams use.

This data infrastructure now forms the bedrock of all other applications within Aegon Global that handle market data or need data to model economic exposures. More importantly perhaps,

Alveo also empowered the actuaries to synthetically model longer dated interest rate maturities and
properly match deep out-of-the-money instruments with liabilities at the end of the term-spectrum (i.e.: where one cannot expect to model things mark-to-market).

On top of all this, the infrastructure captures how and when data is being overwritten or modelled, rather than directly observed in the market. That kind of tracking and tracing of data changes, subsequently brings the desired data-lineage transparency that regulators and auditors so much desire. Especially now that the insurance industry is under increased pressure from regulators and other bodies to ensure that data captured and utilised within the organisation is of sufficiently high quality, and that it can provide ample proof that decisions are based on data that is accurate, complete and appropriate.

About Alveo

Alveo is the leader in market data integration and analytics solutions for financial services. Focused on optimizing data flows for business user self-service, we provide cloud-native data aggregation and data quality management that enables clients to easily access trusted data while maximizing their data ROI.

Through our managed services, we ensure that clients can smoothly onboard, prepare and validate data for use in operations, trading, investment management, pricing, risk, reporting and machine learning.

We service a global client base and our award-winning technology provides easy integration into business user workflows and a proven platform for advanced analytics. Through combining deep domain expertise with latest open-source technologies, we help financial institutions ensure high quality data, optimize market data cost and maximize productivity.