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Solution primer

OneSumX Integrated Risk and Reporting for Pillar 2 in APAC

While Basel IV has been evolving on multiple fronts, regulators across various jurisdictions in Asia have set down their Pillar 2 requirements and expectations. Banks and other regulated financial firms must comply with these standards. The purpose of Pillar 2 is to identify, and address risks not adequately captured by Pillar 1. Under Pillar 2, the Australian Prudential Regulatory Authority (APRA) assesses how robust a firm's business model is, on a forward-looking basis under stress, including resilience to unanticipated changes. Stress events impact cash flows, liquidity, profitability, and solvency, where the implementation of Pillar 2 is a powerful regulatory tool. Hence, firms must carry out stress tests and scenario analysis to build their contingency plans to preserve their viability and protect their customers and investors.



OneSumX Integrated Risk and Reporting for Pillar 2 in APAC

The Pillar 2 framework, as recommended by APRA, allows firms to appreciate intertemporal risk dynamics, and provide important information to APRA on how a firm may use management actions, to preserve its franchise should an adverse market event occur.

The Stress Testing paper published by APRA in December 2020, lays out scenario overviews and Stress Test results and related key drivers. It also summarizes the salient learnings and steps going forward. The paper states, “Stress testing is a core prudential tool APRA uses to assess the adequacy of bank capital to withstand adverse economic conditions. The primary objective is to provide assurance of the resilience of the banking system to a severe shock.

The APRA’s Pillar 2 puts the onus on CFOs and CROs to formulate a solution for addressing the new reporting requirements.

APRA has reinforced the importance of stress-testing as a critical forward-looking analytical tool based on the early-2023 banking turmoil and intends to conduct a banking stress test.

Typically, such an exercise requires close collaboration with the heads of various risk departments to ensure an integrated view of the impact of stress testing, cash flows, liquidity, profitability, and solvency before and after management actions can be taken.

As firms produce forward-looking Capital Management positions, it is also

interesting to note how APRA has used the results to advise on proportions of capital – in both Tier 1 and Tier 2 categories – to provide some flexibility in managing capital. In Prudential Standard APS 110, APRA requires that a bank uses a Capital Conservation Buffer over and above its baseline capital requirements, as well as a Counter-cyclical buffer.

In a similar vein, Hong Kong Monetary Authority’s (HKMA) CA-G-5 describes how the Pillar 2 framework will operate under the capital adequacy framework and is part of HKMA. Pillar 2 guidelines reflect risks not captured, or not adequately captured, in Pillar 1. In addition, the Pillar 2 capital requirement provides a capital cushion to bolster resilience in times of stress without reference to specific risks.

Besides APRA and HKMA, regulators in China, Singapore and Thailand have emphasized Pillar 2 calculations as part of their supervisory process.

However, as most departments within a bank tend to have their own systems for stress testing purposes – Credit Risk calculation, Market Risk assessment, Interest Rate Risk forecasting, and Liquidity Risk analysis, achieving an integrated view across the cash flows, liquidity, profitability, and solvency remains a great challenge for most financial institutions.

Modeling for the same business plan – across macro-economic forecasts and risk factors multiple times, using different risk systems is inefficient and resource intensive. This can result in duplicating efforts, and inconsistencies, as each risk system draws on its own data and models – ultimately increasing the firm's operational risk. Additionally, the potential variance in results creates interpretational and strategic challenges from a decision standpoint.

Deploying a single solution using a unified data model, macro-economic forecasts and risk factors that can be combined across risk classes – allows for the derivation of baseline and stressed outcomes – before and after management actions. This approach of a single calculation run not only delivers operational efficiency, but also provides an integrated and consistent view for the CRO, CFO, CEO and Board. This unified approach to data reporting makes Pillar 2 calculations an essential management tool.

Built on a single data model and modeling platform, the OneSumX Integrated Risk and Reporting for Pillar 2 solution delivers firms an integrated risk platform designed to address the key areas of Pillar 2 quantitative requirements.

OneSumX Integrated Risk and Reporting for Pillar 2 solution provides a consistent application of analytics and scenarios, delivering unified and enterprise-wide results across risk classes.

The modeling tools allow users to compare business-as-usual and forward-looking plans to stress scenarios, the results of which can be used for management actions. The reporting tools allow the graphical display of key risk metrics, compare outcomes across systems, and deliver regulatory reporting templates for jurisdiction specific reporting as required by APAC regulators.

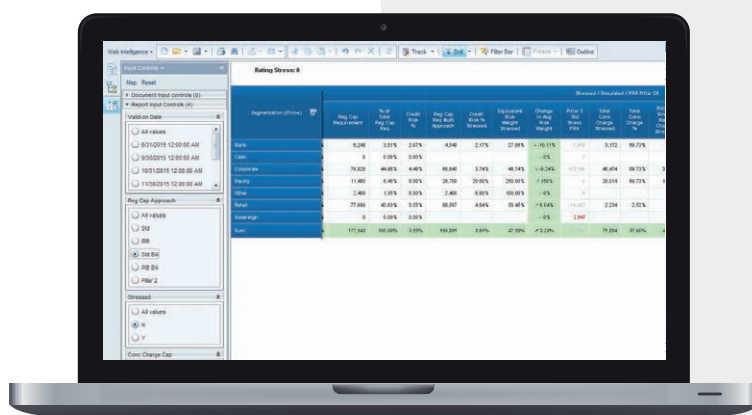
Key benefits:

- Improve operational efficiency
- Drive forward-looking view of the business
- Reduce costs and improve efficiency by eliminating data duplication, inconsistent modeling across risk classes, and manually intensive reconciliation between Pillar 1 and 2
- Benefit from full data versioning and lineage

OneSumX Integrated Risk and Reporting for Pillar 2

The OneSumX Integrated Risk and Reporting for Pillar 2 solution delivers a wide set of capabilities to support Pillar 2, ILAAP and ICAAP requirements. The analysis calculates the new Pillar 2 charges for the Standardized Approach and Concentration Risk alongside impact analysis for Basel III and related concentration charges.

In addition, our OneSumX Integrated Risk and Reporting for Pillar 2 solution also provides liquidity stress testing, multi-year, ad-hoc projections of risk, income/expense, liquidity, profitability and capital adequacy with shared micro-and macro-economic assumptions, growth assumptions and stresses, supporting many facets of Pillar 2.



OneSumX Integrated Risk and Reporting for Pillar 2

Highlights of the OneSumX Integrated Risk and Reporting for Pillar 2 solution coverage by risk type:

Credit Risk

Application of the regulator's benchmark risk weights to respective asset classes and stress testing risk weights and collaterals under various business scenarios.

Market Risk

Our OneSumX solution allows users to assess and stress illiquid, concentrated and one-way positions through the integration of the stressed market risk factors.

It also determines VaR, stressed VaR, expected shortfall (ES) and stressed ES based on a 1 in 1000-year confidence level over a one-year time horizon, as well as calculating the difference between Pillar 1, Pillar 1 adjustments for model risk and a 1 in a 1000-year event to estimate the Pillar 2. Furthermore, our solution assesses the impact of the new FRTB rules before their deployment to manage positions and risks pre-emptively.

Counterparty Credit Risk

With the OneSumX Integrated Risk and Reporting solution clients can analyze and improve risk management practices in respect of derivatives, margin lending, securities lending, repo and reverse repo, as well as long settlement business through analysis and stressing of settlement risk, collateral management, wrong-way risk and model validation.

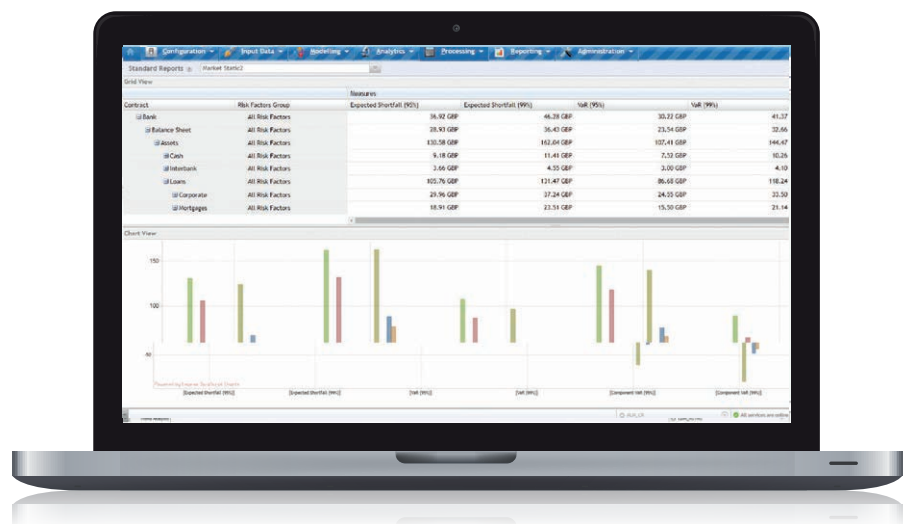
Our solution also hosts impact assessment capabilities, analyzing the impact of the revised rules for SA-CCR to improve ISDA contract negotiation and capital planning.

Credit Concentration Risk

The OneSumX solution enables organizations to measure and manage single name, sector and geographic concentration using the Herfindahl-Hirschman Index (HHI) under stress scenarios. It maps HHI output ranges to capital add-ons and reports them in ICAAP.

Interest Rate Risk in the Banking Book

Classifying the positions exposed to interest rate risk, identifying and determining the expected cash flows, measuring, managing and reporting duration risk, basis risk and optionality risk, the use of alternate behavioral, stochastic and deterministic stress scenarios to estimate interest gap, VaR, NII, NIM, EVE, ΔEVE and EaR is all covered by the OneSumX solution's capabilities. Additionally, the solution allows users to understand and mitigate the risks from different interest rate shocks on fixed, floating, derivate and non-maturing assets and liabilities. Furthermore, OneSumX also allows for the application of capital add-ons and regulatory aggregations rules.



**Capital Buffer**

Calculate the amount of capital, both quality and quantity, to cover the firm's Pillar 1 and Pillar 2 risk under severe stress. Assess the impact of APRA's Counter-cyclical buffer (CCyB) as per APS 110.x, as well as HKMA's CA-B-1 and CA-B-3 for scenarios and sensitivity analysis per jurisdiction.

Liquidity Risk

The OneSumX solution enables our clients to measure, monitor, manage and stress all contractual funding as well as market liquidity risk from cash flow mismatch. Assess risk to survival horizon, net liquidity position, peak marginal and cumulative outflows across a wide range of scenarios – that include debt-buy back, margined and non-margined derivatives as well as securities financing transactions.

Leverage

Our solution also measures, monitors, manages and stress tests all aspects of leverage ratio, considering potential jurisdiction specific changes to SA-CCR and NSFR that directly impact leverage.

Profitability

In both static and going concern dynamic analysis, our solution lets organizations define, measure, monitor and manage profit or loss, net interest income and net interest margin, as well as FTP rates, Return on Risk Weighted Assets (RoRWA) and Return on Equity (RoE).

Economic Capital

The OneSumX solution allows firms to compare regulatory capital requirements against alternative measures of economic capital, using classical models based on VaR, Default type (CreditRisk+) and Transition type (CreditMetrics) with proprietary enhancements at different confidence levels.

The OneSumX Integrated Risk and Reporting for Pillar 2 solution delivers firms an integrated risk platform designed to address the key areas of Pillar 2 quantitative requirements.



Improve operational efficiency and drive a forward-looking view of the business

OneSumX Integrated Risk solution is a best-in-class risk management and reporting solution. The solution helps firms improve operational efficiency and drive the forward-looking business view regulators require by linking a firm's risk profile, risk management, risk mitigation systems and its capital and liquidity planning.

Deploying a single solution which uses a unified data model, macro-economic forecasts and risk factors that can be combined across risk classes, allows for the derivation of baseline and stressed outcomes – before and after management actions. This approach of a single calculation run not only delivers operational efficiency but provides an integrated and consistent view for the CRO, CFO, CEO and Board.



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Related products

OneSumX for Regulatory Reporting

OneSumX for Regulatory Reporting has been recognized in the industry as a leading solution over many years, receiving top places in Chartis Research Risk Tech 100 rankings for regulatory reporting, and awards from Banking Technology, Finance Monthly and Wealth & Finance International, among others.

OneSumX for Risk Management

As a contract centric integrated financial risk management solution, OneSumX for Risk Management generates expected and unexpected cash flows based on anticipated events over the lifetime of the contract. These events reflect the outlook for the macro economy, market risk factors, the strategy of the firm and the expected behavior of its counterparties.

OneSumX for Basel

OneSumX for Basel is a holistic, integrated solution that combines data, calculations, and, reporting to help financial institutions stay compliant with UK Basel 3.1, EU CRR3 and Basel IV.

About Wolters Kluwer

Wolters Kluwer (EURONEXT: WKL) is a global leader in information, software solutions and services for professionals in healthcare; tax and accounting; financial and corporate compliance; legal and regulatory; corporate performance and ESG. We help our customers make critical decisions every day by providing expert solutions that combine deep domain knowledge with technology and services.

Wolters Kluwer reported 2023 annual revenues of €5.6 billion. The group serves customers in over 180 countries, maintains operations in over 40 countries, and employs approximately 21,400 people worldwide. The company is headquartered in Alphen aan den Rijn, the Netherlands.

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Learn more about the OneSumX for Finance, Risk and Regulatory Reporting solutions. [Click here.](#)

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