OLIVER WYMAN

Financial Services

ASIA PACIFIC FINANCE AND RISK SERIES

WINNING IN THE ERA OF LIQUIDITY

TURNING DEPOSIT MANAGEMENT INTO COMPETITIVE ADVANTAGE

MARSH & McLENNAN COMPANIES

The Global Financial Crisis, Basel III and an increasing focus on liquidity risk have heralded a new era for banking and liability management. The very real cost of liquidity risk is made transparent by regulation. Customers are ever more selective in deposit rate hunting. Understanding the stability of funding is more important than ever as customers have their own unique values and priorities. The tools required to understand these issues have historically existed in silos in banking, but those that invest in bringing them together will enjoy a significant competitive advantage as the value of high-quality liquidity risk management and deposit analytics continues to increase.

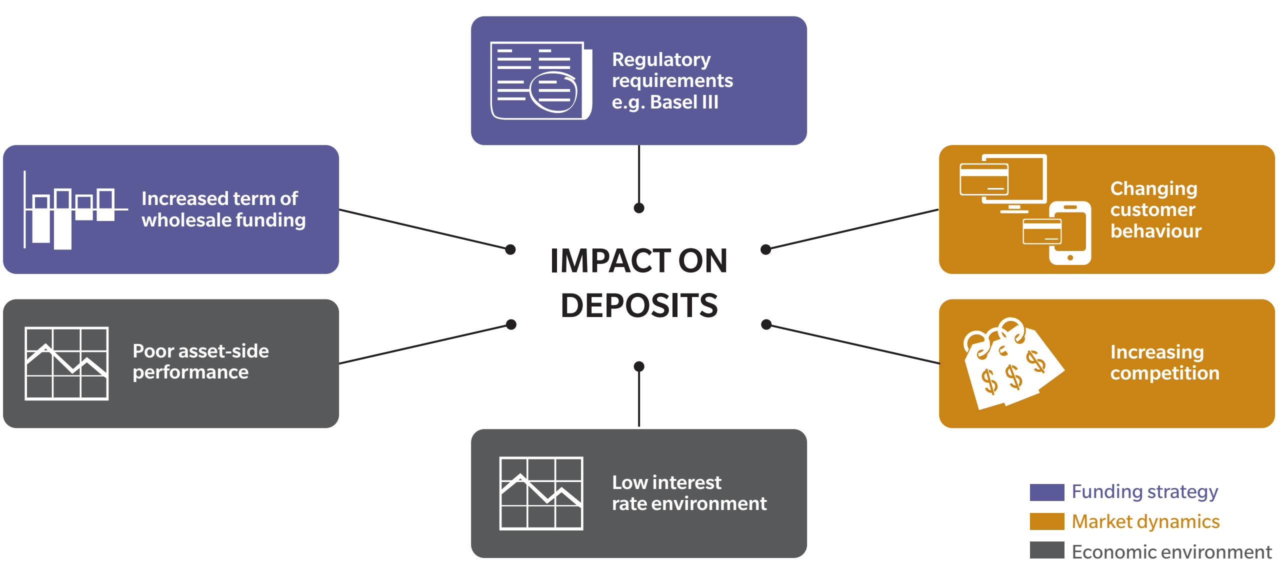
THE ERA OF LIQUIDITY

In 2009 liquidity leapt from being a "forgotten risk" to the top of the regulatory and banking agenda. Deposits are central to an effective liquidity risk management strategy and multiple forces are driving the deposits story. Low interest rates, increasing customer sophistication and tough competition in some markets combine with newly introduced costs of managing liquidity risk under the Liquidity Coverage Ratio (LCR), to push deposit management ever higher on the CFO "top of mind" list.

Mature markets have historically enjoyed liquidity-rich environments that have negated the requirement for advanced analytics on the liability side of the balance sheet. The last 15-20 years have been characterised instead by a journey to develop and embed advanced credit risk performance metrics on the asset side of banking. In comparison, understanding and assessment of liabilities, and in particular deposits, has had much less focus. While liquidity itself is not a binding constraint in many markets, the cost of deposits continues to increase.

Traditional approaches to deposit management have been profit and loss (P&L) focused. Behavioural elements considered have typically been judgmentally applied and at a broad portfolio level, and funding value assessment was relatively basic, contractually based, and often led out of Treasury rather than integrated in a single deposit value process. Economics of deposits have typically been measured based on mark-down versus a benchmark and rarely embedded adjustments for liquidity risk costs, regulatory or otherwise.

Exhibit 1: Multiple forces are driving pressure on deposit liquidity risk and margins



Source: Oliver Wyman

A PRIZE WORTH HAVING

The industry capabilities required to integrate and embed more granular risk based understanding of deposits are still in development, and for many will require significant investment. However we observe the returns from leading institutions developing improved understanding have been an order of magnitude greater than the investment required, for example:

10%-15%

reduction in liquidity buffer requirements from increased granularity and advanced customer segment analytics.

50%-75%

reduction in potential Interest Rate Risk in the Banking Book (IRRBB) Pillar 1 capital charges from implementation of granular behavioural interest rate maturities.

>25%

increase in sustainable revenue in 12 months through advanced deposit pricing utilising granular economic value and elasticity analytics.

>25% increase in sustainable revenue from advanced deposit pricing

THE SCIENCE OF DEPOSITS

Best practice understanding of deposit value requires the calculation and integration of three core analyses, and their incorporation with required liquid assets defined by internal liquidity risk and LCR regulation:

1. **Behavioural tenor (or average life):** The average remaining life of balances in a given portfolio or deposit segment calculated from the current age distribution of balances
2. **Core, non-core balances:** Separates balances in a portfolio or deposit segment into "core" – long duration, and "volatile" – short duration based on assessment of portfolio balance volatility. Core can be further split into rate-sensitive and non-rate sensitive, where rate-sensitive indicates the proportion of balances sensitive to changes in the external interest rate environment
3. **Price elasticity:** Analysis of sensitivity of customers to changes in the interest rate received on the product. Can be separated out into two components:
   A. Product elasticity – sensitivity of balances to product price position in the market (absolute sensitivity);
   B. Customer elasticity – the sensitivity of customer balances to changes in price offered based on customer characteristics (relative sensitivity)

While most institutions have started to institutionalise the concepts of behavioural tenor and core/non-core deposits as part of their liquidity risk and Funds Transfer Pricing (FTP) frameworks, few have done so at more than a product or LCR segment granularity. Customer level assessment involves the further segmentation of portfolios based on customer segments that drive measurable behavioural differences, for example:

Banking characteristics	Customer characteristics
Number of products	Age
Type of products	Income/wealth
Channel	Industry
Rate (market leading vs. not)	Location
Balance (above/below Government Guarantee)	Length of relationship with bank
...	...

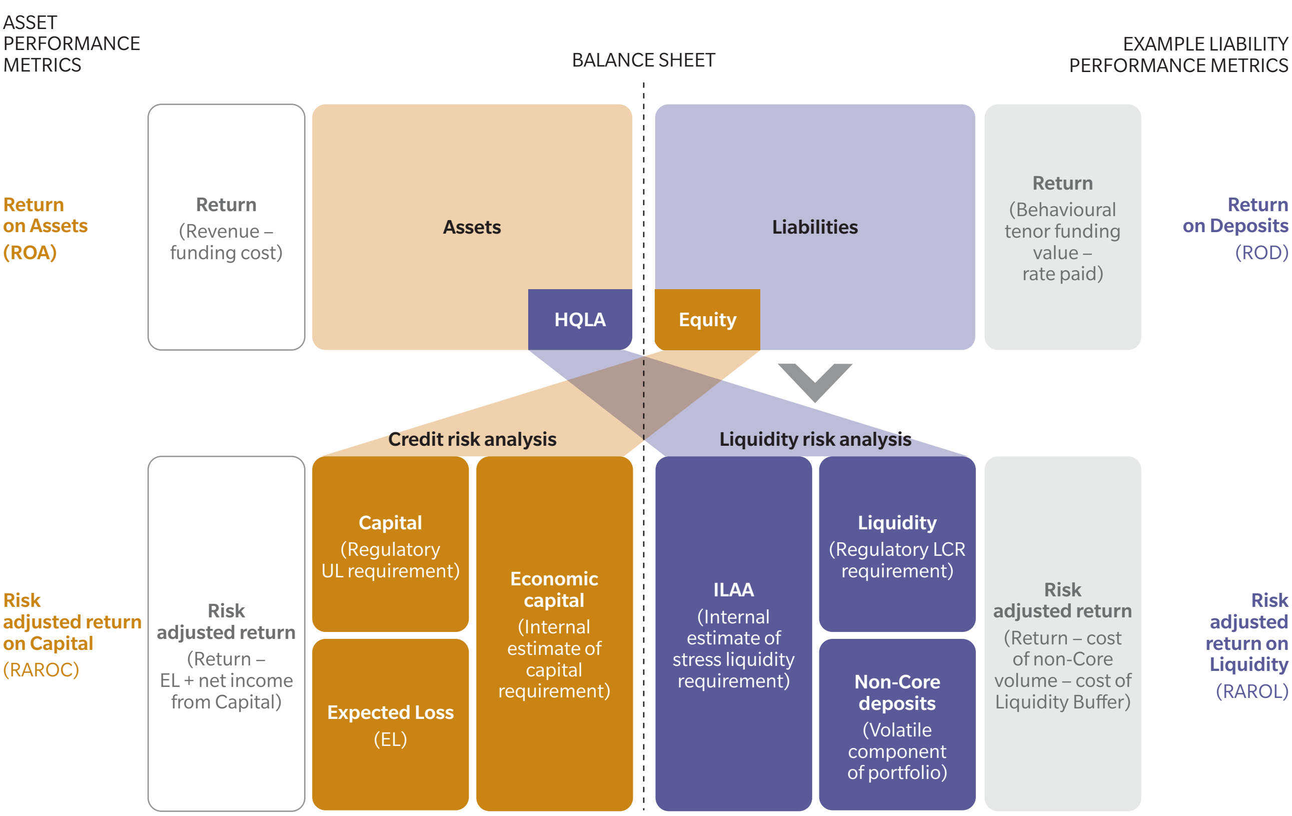
Source: Oliver Wyman

LIQUIDITY – THE NEW CAPITAL

The combination of rising demand for deposits and formalisation of regulatory liquidity requirements is now providing the framework and incentive for the development of advanced value metrics for the liability side of the balance sheet.

Oliver Wyman defines these new metrics in Exhibit 2, the components of the LCR and liquidity risk combined with advanced deposit analytics facilitate the creation of return measures for liabilities that are analogous to Return On Assets (ROA) and Risk Adjusted Return on Capital (RAROC) metrics for assets. These metrics are referred to in the example as "Return on Deposits" and "Risk Adjusted Return on Liquidity" and are already allowing advanced institutions to calculate and optimise the underlying economic and risk adjusted value of their deposit books at a highly granular, customer level.

Exhibit 2: Framework for deposit value metrics



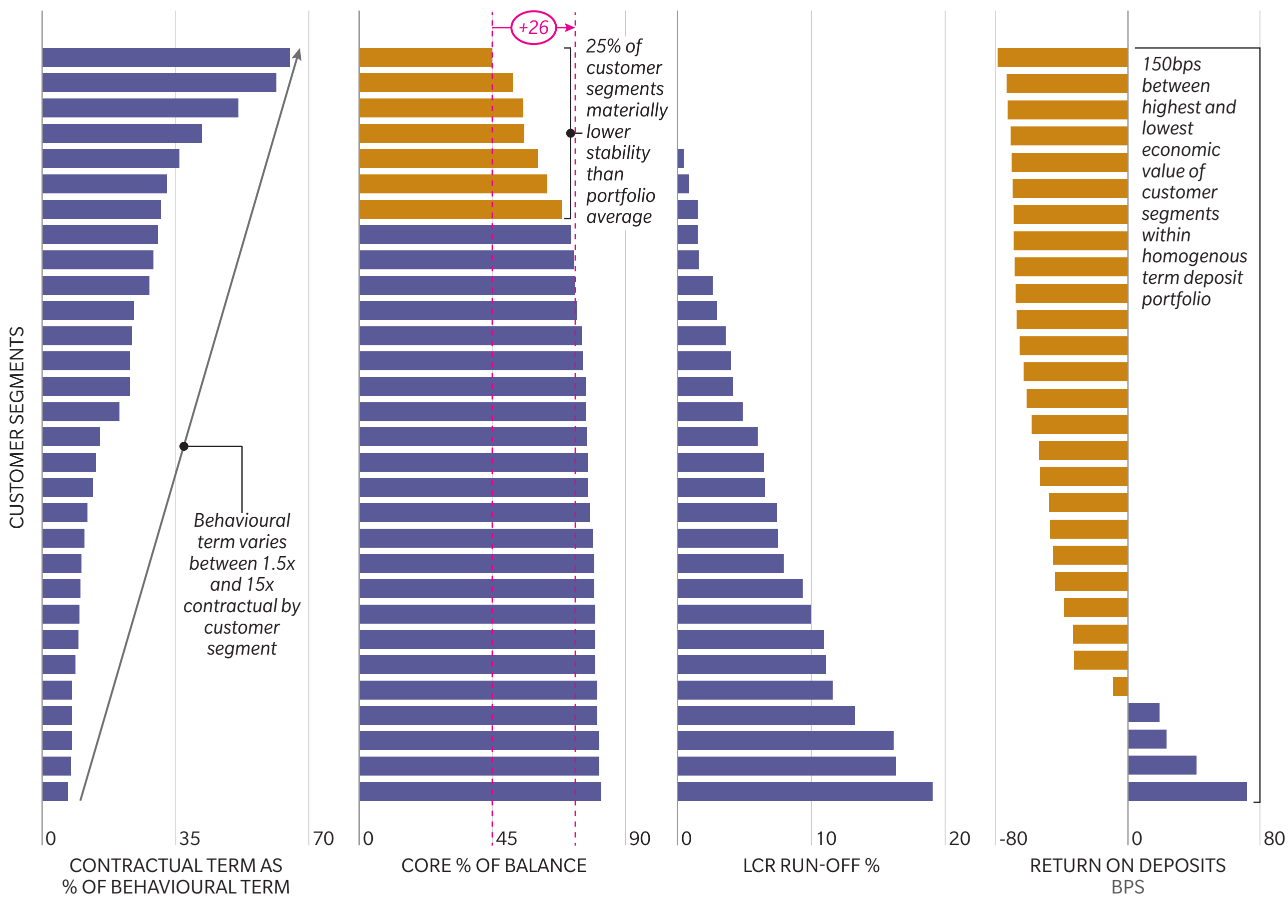
Source: Oliver Wyman analysis

Common sense tells us that not all depositors (or their deposit balances) behave the same, and customer level calculation of underlying value components has shown empirically that significant differences in deposit value exist within seemingly homogenous product portfolios.

Exhibit 3 shows a disguised example of observed differences within a business term deposit portfolio. The bars represent granular customer segments e.g. split by tenor, age of customer relationship, number of products held, type of products held etc. ordered by result for each chart shown.

Exhibit 3: All dollars are not equal

BUSINESS TERM DEPOSIT CUSTOMER SEGMENT ASSESSMENT

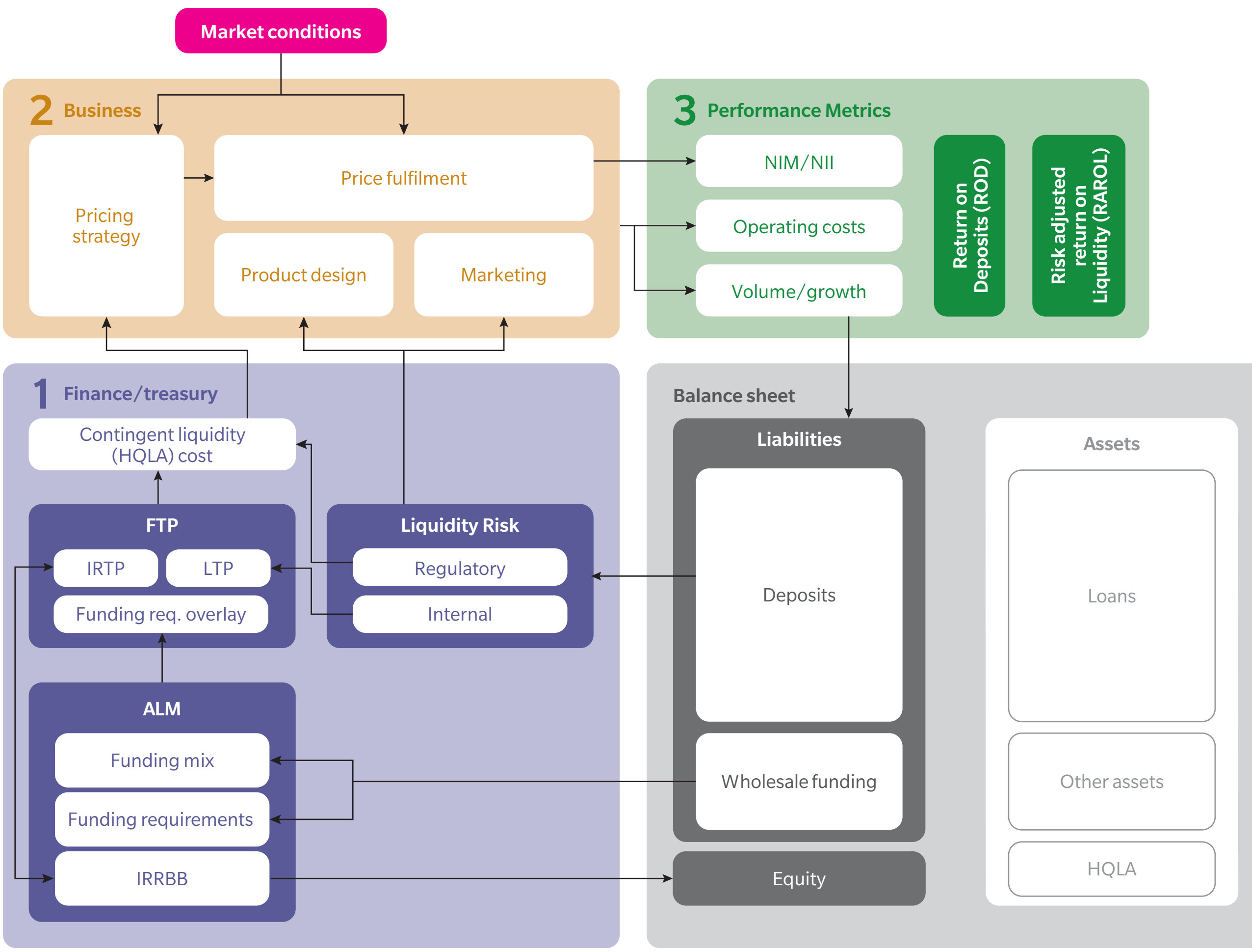


Source: Oliver Wyman analysis

IT'S ALL RELATIVE

Understanding the relative differences within portfolios will unlock significant value through enabling better management and decisions to be made across all areas of the bank, from FTP, liquidity risk management, and IRRBB to product design, pricing, and marketing campaigns.

Exhibit 4: Advanced value metrics will inform all areas of deposit and liability management



Source: Oliver Wyman

Banks implementing these advanced capabilities benefit in multiple ways with immediate financial impact:

Finance/ Treasury	• Significantly increased ability to govern scarce resource allocation based on underlying funding value: – Optimisation of behavioural based interest rate and liquidity transfer pricing calculations – Reinforcement of deposit influence on Asset Liability Management (ALM) hedging – Significantly improved management of IRRBB through more granular understanding of non-contractual term profiles, with associated material impacts to potential capital requirements under proposed new Basel legislation – Greater understanding of deposit behaviours for incorporation in liquidity risk strategy and LCR segment identification for improved and more efficient liquidity ratio management
Business	• Integration of risk and economic value through FTP with more granular portfolio understanding of value, together with advanced behavioural analytics will facilitate: – Provision of granular customer value and behavioural analytics to augment and materially improve banker pricing of negotiated deposit products – Improved product design and pricing strategy through targeting of high value, low risk, customers and incorporation of features facilitating changes in customer risk and stickiness – Improved marketing campaign efficiency through granular differentiation of targeting based on customer value propositions and behavioural profiles – avoiding the "hot money" – Greater understanding of customer segment values and increased retention strategy efficiency, through identification and stratification of "high value at-risk" vs. "low-value hot money" customers – Incorporation of deposit economic value as part of overall customer value assessment, including improved ability to separate out and measure potential relationship value of deposit products
Performance management	Superior identification of sources of value leading to improved management of deposit portfolio performance by business

WE'VE BEEN HERE BEFORE

As with the capital journey of 15 years ago, successful creation, adoption and implementation of advanced analytics and metrics for liabilities will require co-ordination and sponsorship across all areas of the bank, from the CFO to Treasury, Risk and the Business. We expect to see many of the same challenges and resistance observed. History has shown that laggards in the development of capital metrics have felt the pain of adverse selection and high capital costs, and those that embraced data and analytics the rewards.

In an era where deposit margins are squeezed, and the cost of liquidity-risk becomes real, the winners will be those that are able to turn liquidity-risk management into competitive advantage through granular understanding of deposit value and enablement of the front line to manage an institutions deposit risk and liquidity ratio profiles.

The investment required for many will be large, and the challenges significant. Oliver Wyman has developed methodologies at leading institutions to help bridge the gap between data limitations and analytics, and to design and implement the road-map for capability development and value realisation.

From a business perspective, a sustainable two basis-point improvement in margin on, for example, a $200 BN wholesale deposit portfolio equals a $40 MM revenue uplift, therefore a few basis points from more efficient, sustainable, risk based pricing can be a significant prize indeed.

Winners will be those that are able to turn liquidity-risk management into competitive advantage

Oliver Wyman is a global leader in management consulting that combines deep industry knowledge with specialised expertise in strategy, operations, risk management, and organisation transformation.

For more information please contact the marketing department by email at info-FS@oliverwyman.com or by phone at one of the following locations:

ASIA PACIFIC	AMERICAS	EMEA
+65 6510 9700	+1 212 541 8100	+44 20 7333 8333

AUTHORS' CONTACT INFORMATION

David Howard-Jones
Partner, Finance and Risk Practice
+61 2 8864 6555
david.howardjones@oliverwyman.com

Wolfram Hedrich
Partner, Finance and Risk Practice
+65 6510 9700
wolfram.hedrich@oliverwyman.com

Chris Evans
Principal, Finance and Risk Practice
+61 2 8864 6555
chris.evans@oliverwyman.com

www.oliverwyman.com

OLIVER WYMAN