

Asset Liability Management in outsourcing

At IBSM Solutions, Inc. we provide comprehensive interest rate and liquidity risk management for small and mid-sized financial institutions leveraging our best in-class technology and in-depth knowledge of financial risk management across multiple jurisdictions.



Our asset liability management (ALM) in outsourcing service provides clients with a low risk, cost-effective solution to implement or advance their treasury, interest rate and liquidity management framework. By leveraging best in class technology (*MORS Software*), configured to regulatory & industry best practices and operated by our in-house experienced consultants, our clients benefit from having a comprehensive view of their interest rate, liquidity and treasury related credit risks and performance.

With minimal investment and within a few weeks, clients will be able to benefit from an in-depth understanding of the potential risks and opportunities to their current and future net interest margin and liquidity positions, helping them to make informed decisions to manage and control these risks and inform financial and strategic planning.

You will benefit from:

- 1. Immediate Results: Our ALM in outsourcing service will provide you with a comprehensive view and analysis of your balance sheet and risk positions allowing you to understand and control existing and future risks and opportunities.
- 2. Cost efficient alternative: *IBSM Solutions* provides access to world class solutions without the need to acquire a license / hardware by our clients. Our approach is a low risk and affordable alternative to an internal multi-year, resource-intensive and uncertain in-house ALM development project.
- 3. Leverage our risk management expertise to complement your existing resources: Hiring, developing and retaining advanced in-house risk management expertise is a common challenge faced by many smaller institutions. In addition to producing regular reports and analysis, we will provide training and assistance to your team for them to understand and use our reports and supporting databases for decision making and to complement existing MIS.
- **4. Information to guide your decision making:** Move beyond regulatory compliance. Senior Management will be able to incorporate advanced risk-reward concepts into their ALM decision making process (positioning, product pricing, financial planning)



Scope of Services – Tailor-made solutions for your ALM requirements

Our outsourced ALM services provide all necessary elements to implement a robust and sustainable balance sheet management practice. We work with our clients to customize metrics and reports to deliver a tailored made, practical solution suited to the specific nature, size and complexity of their operations. Considering industry "best practices" and regulatory requirements, we will benchmark your operations, provide you with a menu of options and a roadmap to establish and achieve a target maturity level for treasury and risk management operations, aligned with your business goals, and internal and external expectations.

- Liquidity Risk
- Interest Rate Risk in the Banking Book and FX
- Credit & Counterparty risk exposure from Treasury operations
- Weekly and monthly ALCO reports
- Results database (for internal MIS generation)
- Supporting documentation (methodology, models, parameters)

The implementation process is generally carried out over a six-week period during which we will work with our clients to map their transactional information to pre-established templates that will be used to automatically import the required information into our ALM system.

Technology Partner – MORS Software (2018 ALM system of the year)

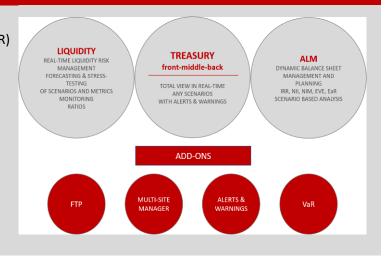
Treasury, Liquidity Risk Management & ALM in ONE solution

MORS solution is based on intelligent and powerful in-memory analytics, offering real-time analysis and reporting throughout the entire bank, integrating both treasury and banking book sides of the bank. Financial institutions use MORS for monitoring, managing and optimising their performance within internal and external constraints. MORS Solution is divided functionally in modules for different types of users and needs. It is a system specifically designed for the needs of medium and small size institutions.

Modules:

- Treasury management, valuation, limit control
- Liquidity management & regulatory limits (LCR, NSFR)
- Banking Book ALM with static & dynamic simulation
- Funds Transfer Pricing (FTP)
- Multi-site local & consolidated view
- Early warnings & limits
- Value at Risk





Balance Sheet Risk Management in Outsourcing Offering			Optional
	Liquidity Risk	Included ✓	Optional
⊥.	- Spot and forward liquidity ratios calculation (LCR, NSFR, NCCF) using contractual,	•	
	regulatory or internal parameters. Survival horizon. Limit monitoring.		
2	Interest Rate Risk in the Banking Book (IRRBB)		
	- Up to 36 months Net Interest Income and Earnings at Risk (EAR), Economic Value of	•	
	Equity (EVE) calculation under regulatory scenarios (client defined scenarios can be		
	configured optionally).		
	- Limit monitoring.		
3.	Credit & Counterparty Risk from Treasury operations	~	
	- Credit and counterparty credit risk monitoring from treasury generated transactions.		
4.	Funds Transfer Pricing		~
	- Understand product and business line contribution and profitability.		
5.	Weekly and Monthly ALCO report	~	
	- Executive summary (dashboard) and detailed reports for individual risks.		
	- Balance sheet, risk and limit monitoring for point #1-3 (4)		
	- Performance indicators		
	- Monthly analysis and review		
5.	Results database for internal MIS generation	~	
7.	Supporting documentation (methodology, models, parameters)	~	
Pr	oduct coverage (indicative)		
1.	Multi currency (CAD, USD, EUR)	~	
2.	Cash and deposits with banks, incl. mandatory deposits	~	
3.	Fixed income instruments	~	
1.	Repos and secured financing transactions	~	
5.	Derivatives: Hedging interest rate and FX positions (swaps, forwards, futures)		~
õ.	Loan portfolio (Commercial, Retail, Mortgages)	~	
7.	Demand deposits (chequing and saving accounts)	~	
3.	Term deposits	~	
9.	Wholesale funding (CDs, Bonds)	~	
0	Other assets / liabilities, Capital	~	
11	. Off-balance sheet positions (undrawn lines of credit and other contingent flows)	~	
Эt	her Services		
1.	Risk Governance: Developing and evaluating existing risk management framework,		~
	establishing tolerance and limits, management structure, policies and procedures, systems,		
	models and model risk management, internal / external reporting.		
2.	, , , , ,		~
	covering investment portfolio, own funds, wholesale funding, FX hedging, related credit		
	risk as well as issues related to subsidiary operations (stand-alone and consolidation)		
3.			~
	compliance (LCR, NSFR), liquidity buffers, stress testing, cost-benefit attribution.		
4.			~
_	management and decision support frameworks, risk identification and scenario design.		
	Funds Transfer Pricing and Profitability: FTP setup, risk transfer rules and pricing, cost /		~
	benefit allocation. Linking balance sheet management to financial planning and analysis.		
ò.	In-House training: Providing a cost-efficient alternative to ensure the different areas and		~
	staff involved in ALM have the required level of knowledge and understanding.		



Our Experience:

Karl Rubach is the Managing Director and founder of IBSM Solutions, Inc. He has over 20 years of international Treasury, Balance Sheet and Capital Management experience.

He has led the implementation of ALM, Liquidity, Risk Adjusted Return on Capital (RAROC) and Balance Sheet Optimization frameworks, including Funds Transfer Pricing (FTP) and Economic Capital allocation.

He is a frequent speaker at industry events. He holds a BA in Economics, a Master Degree in Finance from ITAM and is a CFA Charter holder. **Guillermo Domínguez** is based in Mexico City and has over 20 years of experience in the financial industry as auditor, regulator, risk manager and consultant in finance, profitability, FTP, ALM, Corporate Governance, Operational Risk Management and Processes, providing advice for Financial Institutions in Latin America, the United States and Europe.

He has been professor at ITAM (Mexico), and has published papers on Valuation Fundamentals for Financial Intermediaries using Funds Transfer Pricing and a Valuation Model that includes risk in cash flows with the Mexican Finance Executives Institute (IMEF), where he has been Vice president of the Technical Committee. He is CPA and holds a Master's in Finance from ITAM.

To learn how your institution can benefit please contact:

Karl Rubach, CFA
Managing Director
Dorval Drive 1267, Unit 36
Oakville, ON L6M 3Z4
+1 (416) 388 3079
karl.rubach@ibsmsolutions.com
www.ibsmsolutions.com