ALM360

The Unified Balance Sheet Management Platform for Credit Unions By: Adam Stone, President of QuantyPhi

Executive Summary

Credit unions have grown into sophisticated, multi-line financial institutions. However, the systems supporting strategy, risk, and execution remain disconnected. Asset Liability Management (ALM) is calculated in one system, Current Expected Credit Loss (CECL) modeling performed in another, liquidity is stressed separately, and financial simulations are often modeled in spreadsheets. Investment and loan trading lacks transparency and tools to model balance sheet impacts, while peer comparisons are compiled separately. These silos slow decision-making, increase model risk, and complicate governance.

ALM360, delivered through Beastro, Corporate Central's next-generation platform, unifies these capabilities. The platform centralizes assumptions, data, and calculations so every module, including ALM, liquidity, CECL, financial simulation, optimization, trading, performance reporting, profitability, and peer analytics, draws from a single source of truth. The result is a seamless trade-to-impact workflow where leaders can simulate strategies, execute with confidence, and instantly see the effects on risk and performance.

This whitepaper explores the challenges of siloed processes, explains how ALM360 works, and outlines the strategic, operational, and governance benefits for credit unions of all sizes.

Note: Investment trading execution within ALM360 is coming soon. Investment securities are available now within ALM360 for analysis and strategic decision-making. The ability to execute trades directly within the platform will be introduced soon. All other functionality described within this whitepaper are available now.

The Problem: Balance Sheet Risk Managed in Silos

Siloed risk management developed as credit unions responded to regulations and market expectations. Institutions added solutions such as a dedicated ALM tool, a separate liquidity stress workbook, a CECL engine, financial simulation spreadsheets, and multiple investment and loan trading relationships. Each solution addressed an immediate need but introduced friction: inconsistent data, differing timing, and differing assumptions.

This fragmented approach introduces challenges that hinder strategic clarity and operational efficiency:

- **Strategic latency:** ALCO discussions rely on packets that are dated the moment they are compiled; re-running scenarios can take days.
- Model misalignment: Small differences in prepayment, deposit decay, or pricing assumptions produce competing answers across reports.
- **Operational drag:** Credit unions spend disproportionate time collecting, cleansing, and reconciling data rather than analyzing and acting on strategies.
- **Exam pressure:** Governance is harder to prove when assumptions and outputs vary by system and cannot be traced to a single control point.

In this environment, even -high performing credit unions struggle to connect strategy to execution. Trades are evaluated in isolation, policy monitoring lags, and management confidence erodes when numbers disagree.

ALM360 Vision: One Model, One Workflow, One Source of Truth

ALM360 is a modular, end-to-end platform that integrates planning, risk, and execution into a single, governed operating model. At its core is a shared data and modeling engine. All modules operate from the same set of positions, scenarios, and assumptions, ensuring consistency as updates are written back during execution. Delivered within Beastro, credit unions access capabilities with one login and consistent user experience, and with open API integrations to the broader ecosystem.

Core design principles:

- **Unified modeling:** One calculation engine for ALM, liquidity, CECL, financial simulation, profitability, trade simulation, and optimization ensure consistent results.
- **Trade-to-impact loop:** Simulate → execute → auto update ALM, liquidity, performance reports and all model data and analytics in near real time.
- **Governed assumptions:** Central management of prepayment, deposit decay, credit loss factors, and scenarios with audit trails.
- **Platform delivery:** SSO, role-based- access, logging, and security from Beastro's enterprise architecture.

Unified Modeling: The Core Advantage

At the heart of the platform is a shared data and modeling engine that powers every module, from ALM and CECL to trading, financial simulation, and peer analytics. This means that every tool is working from the same assumptions, the same inputs, and the same real-time balance sheet view.

- Consistency across decisions: When all modules use the same shared model, credit unions gain a level of alignment and clarity that is simply not possible with siloed systems. This consistency delivers:
 - Unified assumptions: All projections, stress tests, and forecasts are based on the same economic scenarios, rate curves, and behavioral assumptions. Risk, performance, and planning outputs always remain in sync.
 - Cross-functional alignment: Finance, risk, treasury, and investment teams collaborate using a common language and shared data. This reduces miscommunication and strengthens strategic cohesion.
 - Elimination of conflicting outputs: The same trade or scenario yields consistent impacts across ALM, CECL, liquidity, and financial simulation. Teams no longer need to reconcile conflicting results.
 - Streamlined governance and auditability: A single model drives all outputs, making it easier to document assumptions, trace calculations, and demonstrate consistency to auditors, regulators, and boards.
 - Faster decision-making: Teams make decisions quickly and confidently, especially in volatile or time-sensitive situations, because everyone works from the same data and assumptions.

- o **Integrated reporting**: Board reports, ALCO packages, and regulatory submissions can be generated from a single source of truth, reducing manual effort and the risk of discrepancies.
- Scenario cohesion: Apply a single rate shock or economic forecast across all modules to evaluate the impact on earnings, capital, liquidity, and credit losses holistically.
- Improved strategic planning: Long-term plans and what-if analyses are more reliable when all components of the balance sheet are modeled together under consistent logic.
- **Real-time impact analysis:** The unified model enables credit unions to instantly see how any action—trade, financial simulation change, or shift in assumptions—affects the entire balance sheet. This real-time feedback loop transforms decision making.
 - Immediate scenario testing: Users can simulate changes in interest rates, liquidity shocks, or credit loss assumptions and instantly see the impact on NEV, NII, NI, liquidity ratios, and capital adequacy, all from a single interface.
 - Pre-trade impact visibility: Before executing an investment or loan trade, users can model its effect on the balance sheet, including interest rate risk, earnings, and liquidity. This reduces guesswork and supports more confident execution.
 - Dynamic financial simulation adjustments: As market conditions shift, users update financial simulation forecasts in real time using the same assumptions driving ALM and CECL models. This ensures that financial plans remain relevant.
 - Integrated stress testing: A single stress scenario (e.g., a 300 bps rate shock or a liquidity event) can be applied across all modules simultaneously, showing its full impact on earnings, capital, liquidity, and credit losses.
 - Faster ALCO and board reporting: Real-time modeling and reporting allows credit unions to respond to board or ALCO questions immediately, modeling alternatives and showing outcomes live during meetings.
 - Enhanced responsiveness to market events: Whether it is a Fed rate hike, a
 deposit outflow, or a credit event, the platform allows credit unions to quickly
 assess exposure and act, before the impact is felt.
 - What-if planning at scale: Credit unions can run multiple scenarios in parallel (e.g., different investment ladders or loan sale strategies) and compare outcomes instantly, supporting more strategic, data-driven planning.
 - Reduced operational lag: All modules are connected, eliminating the need to export data between systems or wait for batch updates. The platform reflects changes immediately, reducing delays and manual errors.
- Seamless workflow across functions: ALM360 breaks down department silos by enabling
 a continuous, interconnected workflow across finance, risk, treasury, lending, and strategy
 teams. All modules are powered by a shared model, ensuring that every function operates
 from the same data foundation and strategic assumptions. Here is how that translates into
 real-world benefits:
 - Cross-functional collaboration: Finance, risk, and investment teams collaborate
 in real time using shared tools and dashboards. For example, the finance team
 builds a financial simulation using the same rate scenarios modeled by the ALM
 team, while the investment team simulates trades that align with both.
 - Unified planning and execution: Financial simulation, CECL provisioning, and liquidity planning are no longer separate exercises. A change in one area (e.g., a

- revised PD-LGD CECL forecast) automatically changes the others, ensuring that all plans are aligned and current.
- Streamlined ALCO preparation: Generate ALCO packages from a single platform, pulling in consistent data from ALM, liquidity, CECL, and trading modules. This reduces preparation time and improves the quality of discussion and decisionmaking.
- Fewer data transfers, fewer errors: All modules are connected, so there is no need to export data between systems or re-enter assumptions. This reduces operational risk and improves data integrity.
- Faster response to change: When market conditions shift or new regulatory guidance is issued, updates are made once and reflected across all modules, enabling faster, coordinated responses.
- Board and examiner readiness: Consistent data and integrated reporting enable credit unions to respond to board inquiries or examiner requests with confidence, clarity, and speed.
- Scalable governance: As credit unions grow, the platform scales with them, supporting more complex workflows, approval structures, and reporting needs, without adding friction.
- Scalability and accessibility: The platform supports both full ALM modeling and Simplified ALM Modeling (based on Call Report data). This provides:
 - Low barrier to entry: Credit unions can begin using the platform with Simplified ALM Modeling, which requires only Call Report data automatically pulled into the platform. No complex integrations or historical datasets needed.
 - Full platform access without full ALM: Even with simplified modeling, credit unions can access liquidity stress testing, CECL projections, financial simulation tools, and trading simulations, ensuring broad functionality from day one.
 - Modular growth path: As needs evolve, credit unions scale into full ALM modeling, advanced optimization, and deeper analytics without switching platforms or retraining staff.
 - Consistent user experience: The interface, workflows, and reporting formats remain consistent, whether using simplified or full modeling. This reduces learning curves and improves adoption.
 - Data continuity: All modules share the same underlying model and yield curve
 assumptions. As credit unions transition from simplified to full ALM, the chart of
 accounts becomes more granular, and assumptions can be modified. However, the
 transition maintains the same consistent reporting feel.
 - Inclusive for all sizes: From small, single-branch credit unions to large, complex credit unions, the platform adapts to fit operational scale and regulatory complexity.
 - Cost-efficient onboarding: Simplified modeling reduces onboarding time and resources, making advanced balance sheet management accessible to resourceconstrained credit unions.

- Audibility and governance: ALM360 is designed with governance and regulatory readiness at its core. By connecting all modules to a single, transparent model, the platform simplifies oversight, strengthens internal controls, and ensures that credit unions can meet both internal and external accountability standards with confidence. Here's how:
 - Single source of truth: All outputs, whether from ALM, CECL, liquidity, financial simulations, or trading, derive from the same underlying data and assumptions.
 This eliminates discrepancies between systems and ensures that every report, forecast, and scenario is traceable to a consistent foundation.
 - Transparent assumption management: Key modeling assumptions (e.g., prepayment speeds, deposit decay rates, credit loss factors) are centrally managed and applied across all modules. This simplifies documentation, reviews, and updates assumptions, supporting internal governance and examiner scrutiny.
 - Audit-ready reporting: The platform generates detailed, time-stamped reports clearly showing inputs, methodologies, and outputs. This supports audit trails for CECL, ALM, and liquidity stress testing, and simplifies examiner reviews.
 - Version control and scenario tracking: Users save, compare, and document multiple modeling scenarios over time. This enables credit unions to demonstrate how decisions were made, how assumptions evolved, and how risk was managed in response to changing conditions.
 - Board and ALCO alignment: Consistent data and integrated reporting provide board members and ALCO participants with clear, coherent insights, reducing confusion and improving the quality of oversight.
 - Regulatory compliance support: The platform aligns with NCUA guidance, CECL requirements, and liquidity risk management expectations. Compliance is embedded into everyday workflows, helping credit unions stay ahead of evolving standards.
 - Reduced operational risk: Fewer manual processes, data transfers, and systems mean fewer opportunities for error. This strengthens data integrity and reduces the risk of misreporting or control failures.
 - Role-based access and controls: The platform supports user permissions and audit logs, protecting sensitive data and ensuring all actions are attributable critical for both cybersecurity and governance.

What's Inside ALM360 (Modules and Capabilities)

1. ALM Modeling (Full and Simplified)

Full ALM Modeling provides Net Economic Value (NEV), Net Interest Income (NII), and Net Income simulations across custom rate paths and time horizons, with instrument-level detail. The platform supports policy limit monitoring, sensitivity analysis, and executive dashboards for ALCO and board presentations. Data is ingested and mapped to products. Scenarios are applied, and outputs are generated for dashboards and report kits.

• **Benefits:** Consistent numbers in every meeting, faster scenario turnaround, and clear policy compliance visualization.

Simplified ALM leverages Call Report data to provide essential interest rate risk oversight and strategic participation for smaller or resource-constrained credit unions. The shared engine and user experience allow credit unions to transition to Full ALM Modeling when ready, with additional data onboarding and configuration.

• Benefits: Low barrier to entry and full platform access without full ALM.

2. Liquidity Modeling and Reporting

Liquidity analytics simulate both base and stressed conditions. ALM positions and assumptions feed liquidity views. Results surface in dashboards and ALCO packets. The platform projects cash flows, deposit runoff, borrowing capacity, funding gaps, and coverage ratios. Users can test and document contingency funding plans within the same environment.

• **Benefits:** Unified risk perspective across earnings and liquidity, faster decisions on funding mixes, and exam-ready stress evidence.

3. CECL Modeling

The platform supports Probability of Default/Loss Given Default (PD-LGD) and SCALE approaches, with segmenting, scenario conditioning, and vintage/cohort analytics. PD-LGD CECL results automatically inform financial simulations, ensuring alignment between performance and allowance.

• **Benefits:** Transparent, auditable allowance with fewer manual reconciliations, and faster close and planning cycles.

4. Financial Simulation

The platform translates modeling outputs into forward-looking financial plans. Users can adjust rate paths, volume growth, pricing strategy, and operating assumptions, and immediately see the downstream effects on margin, earnings, liquidity, and capital, all without leaving the platform.

• **Benefits:** Risk-aware financial simulations, fewer spreadsheets, and easier ALCO/board education on plan tradeoffs.

5. Optimization and Trade Simulation

Users can compare strategies such as buy, fund, swap, hedge using instrument-level analytics and portfolio optimization. The platform enables side-by-side evaluation of multiple paths, helping users select the best combination of income, risk, liquidity, and policy compliance.

• **Benefits:** Faster idea generation, decisions backed by consistent analytics, and clear documentation of rationale for examiners.

6. Integrated Trading (Investments and Loans)

Investments: The electronic trading platform empowers credit unions with transparent access to fixed income security inventory, pricing, and analytics, all with seamless execution capabilities and without the need for costly subscriptions and software contracts – transforming the way investment portfolios are managed. Before trading, users can see projected ALM, liquidity, and capital impacts when combined with the trade simulation module.

 Benefits: Institutional-grade bond analytics and optimization, simulates NEV/NII and liquidity effects before execution, integrates analysis and trading in one workflow, and provides peer benchmarking with comprehensive performance reporting.

Loans: Buy or sell whole loans and participations, supported by due diligence analytics mapped directly to balance sheet and liquidity impacts.

 Benefits: Expand assets flexibility through participations and whole-loan transactions, evaluate balance-sheet impact in real time, maintain governance and compliance, and streamline workflows by consolidating loan trading into a single platform.

7. Investment Performance Reports

Generate on-demand reports covering duration, convexity, yield, credit exposure, contribution to risk, and much more.

• **Benefits:** Consistent analytics and reporting, less time assembling packets, clearer story for stakeholders.

8. Profitability

Profitability modeling identifies earnings drivers and analyzes performance under stress. The platform links income attribution and market valuation, providing a clear, actionable view of product and strategy performance. Integration with ALM, CECL, and liquidity tools ensures every decision is backed by consistent analytics and real-time financial impact.

• **Benefits:** Clearer earnings attribution, unified risk and performance lens, and audit-ready profitability reports.

9. Peer Analytics

Access historical call report data to build custom peer groups and generate comparative reports. These insights validate strategy and quantify opportunity.

• **Benefits:** Defend choices with external benchmarks, identify outliers, and support policy reviews with data.

Strategy + Execution: Closing the Loop

The operating rhythm changes from "model quarterly, decide monthly, trade occasionally" to continuous decisioning. Leaders can ask questions, parameterize scenarios, view outcomes, simulate execution, and implement strategies, all with confidence that downstream risk, liquidity, and performance views will update automatically.

ALCO meetings become interactive: rather than debating whose number is right, the team can explore alternatives together and document the chosen path with a clear audit trail.

How it All Works Together

The platform is a fully integrated, closed-loop system connecting insight, action, and evaluation. Modeling tools including Full ALM, Simplified ALM, CECL, Liquidity, Financial Simulation, and Profitability form the analytical core, offering a comprehensive view of the balance sheet. Execution tools including Investment Trading and Loan Trading enable confident, rapid action. Optimization and reporting tools refine strategies and validate outcomes, supporting continuous improvement. Peer analytics provide external benchmarking for strategic decisions.

- Modeling Tools Full ALM, Simplified ALM, CECL, Liquidity, Financial Simulation,
 Profitability: These tools form the analytical core of the platform, offering a 360-degree view of the balance sheet. Together, these tools ensure that every decision is grounded in a unified view of the credit union's financial health.
 - ALM modeling simulates NEV and NII across rate scenarios, enabling strategic risk assessments.
 - CECL modeling projects expected credit losses using multiple methodologies, feeding directly into capital planning.
 - o **Liquidity modeling** stress-tests funding resilience under adverse conditions.
 - Financial simulation tools translate modeling outputs into actionable plans.

- Execution Tools Investment Trading and Loan Trading. These tools allow credit unions
 to act on insights with confidence and speed. Because they connect directly to the same
 model, users can simulate trades and instantly see their projected impacts before
 executing.
 - Investment trading provides real-time access to securities with integrated ALM impact modeling.
 - Loan trading supports buying/selling of whole loans or participations, with analytics that show how trades affect liquidity, earnings, and risk.
- Optimization and Reporting Tools Optimization, Trade Simulation, and Investment Performance Reports These modules refine strategies and validate outcomes. They support continuous improvement and close the loop between planning and execution.
 - Optimization tools test multiple trade strategies and balance sheet configurations.
 - Performance reports track portfolio metrics like duration, yield, and credit exposure, providing feedback loops for ALCOs and boards.
- Peer Analytics Custom Peer Grouping, Comparative Reporting. These tools provide external benchmarking to guide strategic decisions and demonstrate performance to stakeholders.
 - o Credit unions compare themselves to peers using historical call report data.
 - Custom peer groups provide tailored insights based on asset size, geography, and other factors.
 - This context helps validate internal strategies and supports board-level discussions and examiner reviews.

Integrated Decision Support:

- Every decision is informed by consistent, real-time analytics.
- Every action is measured for its impact on risk, earnings, and liquidity.
- Every outcome is evaluated against internal goals and external benchmarks.

Why ALM360 is the Way of the Future

- Real-time market information: Market-based dashboards update as markets move.
- Regulatory readiness: Single source assumptions and outputs simplify validations and exams.
- **Platform leverage**: Delivered through Beastro, with SSO, roles, logging, and APIs for seamless integration.
- **Scalable entry**: Start with ALM + Liquidity, then add CECL, optimization, trading, and more as needed.

Tangible Benefits for Credit Unions

For Strategy

- Faster cycles from weeks to hours with consistent analytics across functions.
- A single narrative for ALCO/board that ties risk, earnings, and liquidity into one story.
- Data driven prioritization of balance sheet actions with optimization tooling.

For Execution

- Trade-to-impact visibility: pre-trade projections and immediate post-trade -updates.
- Fewer manual handoffs and reconciliations; less key-person risk.
- Better collaboration across finance, treasury, lending, and investments.

For Governance

- Central assumption management with audit trails and role-based access.
- Exam-ready policy monitoring and stress documentation embedded in the platform.
- Consistent, reproducible outputs for board packages and management reporting.

Implementation Approach

Start with the modules that solve today's bottlenecks, commonly ALM + Liquidity with access to investment and loan inventories. Because modules share a common data and assumption backbone, expansion does not require retraining or duplicate integrations. Add optimization, trade simulation, and financial simulation to enhance the decision-making process and optimize your balance sheet in ways that were not possible before.

How ALM360 Compares

While point solutions automate individual processes, ALM360 consolidates planning, risk, and execution into a single governed system. This approach reduces vendor management, minimizes integration, and streamlines reconciliation, resulting in a coherent operating model that accelerates results.

The Future, Now

As new market data links, optimization techniques, and partner connections become available, the platform's decision loop becomes faster and more precise, without adding complexity. Platform thinking delivers durable capabilities that compound over time.

Next Steps

- See it live: Request a tailored ALM360 demo focused on your balance sheet needs.
- **Pick your starting point**: Choose the module set that removes your current constraint and expands as you scale.
- Make your next ALCO interactive: Model, decide, and document in one meeting.