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# The Power of ALM: Scenario Analysis

*Takeaways from this article include:*

- *ALM analysis isn't just for regulatory reporting – it's a tool to help drive strategic planning & forecasting especially in times of great economic and interest rate uncertainty.*
- *Increased understanding of balance sheet behavior leads to better financial decision-making and improved earnings.*
- *The power of the simulation model lies in scenario analysis.*

## ALM is a profit center

Banking is a risky business. Meaning, the business model of banking is inherently full of risks. Whether it's credit, interest rate, liquidity, price, operational, compliance, reputation, strategic or systemic risk – financial institutions purposely take on risk to make money. As such, risk isn't eliminated, it's managed. Of the risks, the first four – credit, interest rate, liquidity, and price are those risks generally associated with asset-liability management (ALM). Understanding that ALM risks have a direct and quantifiable impact to earnings via net interest income (NII), the ALM process should be viewed as a profit center as effective finance treasury professionals are those that have built a coordinated framework to drive earnings. This framework encompasses both sides of the balance sheet – earning assets and costing liabilities. Often referred to as proactive balance sheet management, effective ALM not only involves the tasks of budgeting, product management, pricing, and capital planning; it also includes forecasting.

## Cash flows drive earnings

As stewards of NII, an institution's Asset/Liability Committee (ALCO) has the responsibility to maximize NII throughout all stages of the business cycle. Stated differently, the goal of ALM is to maximize net interest income while at the same time protecting the long-term value of equity regardless of changes in interest rates. [I would be remiss if I didn't mention that this important goal must be done within the confines of acceptable levels of risk.] Positioning the balance sheet to maximize NII requires ALCO to understand how balance sheet volume and mix (cashflows) change in different rate environments. As cashflows change, so do earnings. When it comes to understanding how changes in cash flows impact earnings, the analytical power of an ALM model is the tool of choice. This is where an effective ALM framework's task of forecasting via the simulation model comes into play.

## Shape of the Treasury curve matters

Those tasked in building an effective ALM framework understand that the shape of the treasury yield curve plays a key role in optimizing current and future earnings. In normal economic conditions (i.e., the economy is healthy and growing), the treasury curve is positively sloped whereas short-term interest rates are lower than longer-term rates. This normalized curve makes it easier to maximize NII as institutions generally use short-term funding to purchase longer-term assets – loans and/or investments. A flat treasury curve which marks a period of economic uncertainty by investors and is often predictive of a change in the business cycle - where there is no material difference between short-term interest rates and longer-term rates – puts pressure on NII as both sides of the balance sheet reprice at basically the same rate. This lack of spread weighs on NII. Inverted curves - which historically have been a reliable, though not perfect, predictor of recession - cause NII to contract even faster than a flat curve as the institution's cost of funds could; in theory, exceed its longer-term asset yields.

Fed policy – Leading from behind

Current economic conditions are anything but normal with economic growth materially slowing, historically high inflation, tight labor markets and geopolitical risk at levels not seen since the 1940's. In response, policy makers hawkishly increased their benchmark overnight rate 25bps earlier this month and signaled as many as six additional hikes this year, launching a campaign to tackle the highest inflation in four decades even as risks to the economic outlook continue to increase. Looking forward, the Fed's current dot plot shows that overnight rates may decline in the years ahead as central bankers face the arduous task of steering the economy towards a soft landing. The suggested decline in benchmark rates over the long-term reveals that policy makers are likely to increase overnight rates above neutral over the near-term which further weighs on current economic growth. If policy makers tighten too slowly, they risk allowing inflation to run further out of control, requiring even more aggressive policy action. Tighten too quickly and the central bank could tip the economy into recession. The Fed fund futures market has now priced in eight 25bps rate hikes within the next twelve months. Regardless of economic conditions and the resultant path of interest rates, the goal of ALM is to make money – lots of it!

ALM response

As we approach the next phase in the business cycle (& recent shift in monetary policy), the banking industry will be challenged with managing earnings and risk in a much different rate and economic environment than in prior shifts. So, how are we expected to maximize earnings in today's highly volatile operating environment?

Short response: Using the ALM model, institutions should run multiple earnings simulations based on differing interest rate projections. As a tool, the simulation model can quantify the impact to earnings and capital based on an unlimited number of rate paths. Based on model output, ALCO can then develop appropriate strategies to change balance sheet volume, mix and price to maximize NII.

In terms of ALM theory, here's a more detailed response: In addition to using a static view of risks, ALM practices must also include a scenario-driven projection of sensitivities and income changes as static ALM scenarios are of limited use in strategic planning and forecasting. ALM scenario analysis must include a flexible set of levers and buttons that can be combined to replicate business situations and simulate more realistic outcomes. This means the ability to change assumptions, drivers, sensitivities, and interest rates on a dynamic basis with accurate and actionable model output/reporting. Basically, the ALM engine needs to upgrade from being an ALCO report generator to a comprehensive risk analytics machine. Doing so, ALCO will have a better understanding of balance sheet behaviors which leads to better financial decision-making and greater earnings. Feel free to contact CMG's ALM team if you wish to further explore how the simulation model can be used to proactively manage earnings.

Please reach out to your CMG representative to further discuss these concepts.

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