SmartStream Launches Tool for Intraday Liquidity Stress Tests

SmartStream Technologies has launched an intraday liquidity stress testing module to help banks perform immediate stress testing of intraday liquidity flows.

Nadeem Shamim, head of cash and liquidity management at SmartStream, says the new module, which is integrated with the company’s cash and liquidity management solutions, allows banks to run stress tests in minutes—a process that otherwise can take up to eight weeks, factoring in refining the scenarios, making real-time decisions, reporting, and risk analysis.

“One of the key challenges around intraday liquidity management is around data—the volume and the speed at which it’s needed. If you’re stress testing over a longer period, like 30 days, you look at end-of-day data on the balance sheet. But with intraday liquidity, you are also looking at the minute-by-minute movement of the liquidity usage on consolidated accounts too. So the data required, and the movement and adjustment that we need to do to the data to create the stress conditions, is quite extreme,” Shamim says.

Post-crisis standards, most notably the Basel Committee on Banking Supervision’s BCBS 248, seek to address the systemic risk posed by banks’ mismanagement of intraday liquidity positions. Under BCBS 248 frameworks, banks will have to report real-time data about their intraday liquidity positions and test various stress scenarios to assess the impact of their liquidity positions and the impact of any systemic shocks on those positions.

However, obtaining real-time data from legacy banking systems can be a challenge, Shamim says.

“Getting that data, as a client, is always a difficulty. And because of that, our clients find it difficult to make changes to an existing stress calculation that they put in place,” he says.
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The SmartStream module captures clients’ data from the cash and liquidity management solution so clients can test their existing positions. The module is available as a standalone service, or via the cloud.

Stress testing tends to be a manual process, which means that there isn’t much flexibility around the analyses banks can perform during these exercises. If risk teams perform one analysis and then decide they want to do another with different elements, they have to start the process over again, setting it back days or even weeks. Shamim says the SmartStream module provides the necessary flexibility and allows for detailed analysis, with varying elements and scenarios. This can help risk teams respond with greater agility, which is particularly important in unpredictable circumstances, such as a pandemic.

“If you look at what is happening currently under pandemic and stressed conditions, risk teams need to be able to evaluate liquidity stress conditions under different varying elements. So not just simply to say, ‘I assume that payments will be delayed by four hours across the board,’ but to actually be able to say, ‘Right, payments from Type A of [an] institution are delayed by four hours, Counterparty B is delayed by two hours, Counterparty C is a non-receipt.’ So you could run that kind of combination, for example. That has always been a challenge, to change the existing setup. With this tool, you can do that on the fly,” he says.

Shamim says users have flexibility when deciding which liquidity pool they want to test, the elements of the scenarios they want to run, and factors such as the impact of collateral valuation or non-payment from certain types of counterparties and not others, and can combine multiple scenarios. Lastly, the user decides what period they want to run it for—from a week to three months. At that point, the GUI displays the results, and users can view how liquidity looked day-to-day before the stress was applied and after, with overlays available.

Shamim says SmartStream realized that while stress testing is currently just a regulatory box-checking exercise in most banks, these institutions would like to make it part of their normal operations and derive value from it. “Banks would like to run these stress tests internally on a more regular basis so they can understand risk and can have a framework in place to manage actions to address different stress conditions,” he says.

He adds that SmartStream decided that the best way to quantify the value of a technology for banks was to look at how much it costs them to hold liquidity buffers. Certain banks have to hold these buffers as stocks of liquid assets that would enable them to meet cash outflows and collateral needs without affecting their daily operations. Banks, however, say that holding liquidity buffers costs them profits.

So SmartStream commissioned research from consultancy Baringa Partners, which found that firms could reduce their liquidity buffers by managing liquidity. For example, if a firm cuts its liquidity buffers by $6 billion, it could save $50 million per year. This research provided the impetus to develop the module and enable clients to run immediate stress tests, Shamim says.