



LIQUIDITY RISK

UNCOVERING THE HIDDEN
CAUSE OF CORPORATE SHOCKS

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International conflicts, an uncertain global economy, and volatile stock prices are prompting management teams to examine whether they would fare better in a liquidity crunch today than they did when the financial crisis struck seven years ago. Unfortunately, the answer to that question is unclear. On the positive side, banks and non-financial companies have both been shoring up capital reserves, partly in response to new regulations.

But unlike banks, which have been forced by regulators to make strengthening their liquidity risk management capabilities a top priority, many businesses have not improved their ability to analyze and mitigate funding shortfalls. A study by the United Kingdom's Financial Conduct Authority released in September found that most commodity traders do *"not include stress testing and scenario analysis in their assessments of liquidity risk."* This could result *"in large financial pressures and liquidity risks in the event of stressed market conditions,"* according to the report. Our research shows that liquidity-risk management may be an even lower priority for many non-financial services companies. In our view: too low.

In a recent Oliver Wyman survey, we asked commodity-driven industrial conglomerates and asset-backed traders about four critical liquidity-risk-management best practices: comprehensive assessments of sources and uses of liquidity; robust risk and reserve calculations; thorough stress testing; and integrated risk and finance evaluations. We found that only some players are following best practices in terms of liquidity-risk assessment and provision planning, such as taking a wide range of risk factors into consideration and conducting extensive stress testing. But even then, these practices are only being applied in isolated cases. Not one company

Businesses do not have an accurate understanding of the extent to which their organizations remain at risk of funding shortfalls

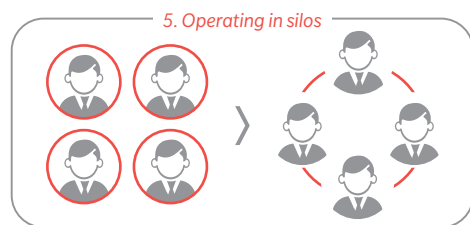
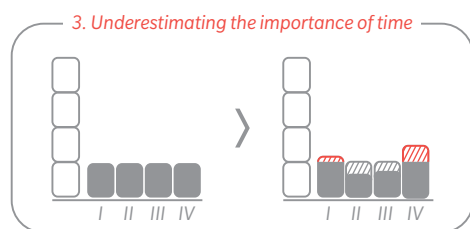
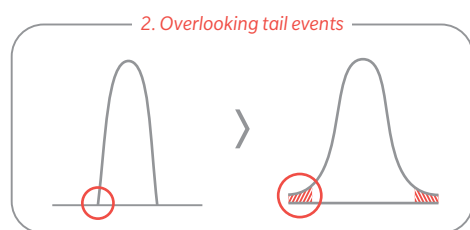
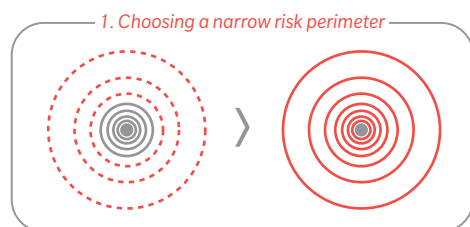
is consistently following best practices for liquidity-risk management across all four dimensions.

Instead, most respondents report that they have only basic liquidity-risk management practices in place. For example, many companies just examine how market price movements will force them to seek more funding. Or they fail to seek the views of both their treasury and risk divisions when stress testing their potential access to funding. (See Exhibit 1.)

There is more work to be done: One of the main reasons that liquidity risk remains a low priority for many organizations is that they do not have a robust enough understanding of how much their organization is at risk of a funding shortfall – or they underestimate the steps required to close the gap. The financial crisis has taught us that liquidity risks are the greatest risks of all in terms of bankrupting a company. But they are difficult to foresee without careful forethought and preparation. That's because they usually occur when risks correlate, overlap, or combine to result in a full-blown crisis. To meet this challenge, liquidity-risk management must be a comprehensive attempt to predict the impact of a perfect storm.

EXHIBIT 1: THE FIVE COMMON MISTAKES IN LIQUIDITY RISK MANAGEMENT

PRACTICES THAT SHOULD BE AVOIDED TO PREVENT A FUNDING SHORTFALL



Source: Oliver Wyman analysis

FIVE COMMON MISTAKES

To take advantage of all that we have learned from the financial crisis and avoid repeating history, companies will need to avoid the five most common mistakes in liquidity risk management:

1. **Choosing a narrow risk perimeter.** As we learned from the financial crisis, companies can suffer from a shortfall of financial resources when a risk event suddenly creates an unexpected need for funding or when external sources for funding suddenly become unavailable, or both. Generally, companies must be prepared for three types of risk events – market, credit, and operational – which could happen simultaneously. Examining all three types of risks also can help organizations to avoid double counting available reserves.

Unfortunately, most businesses tend to focus solely on market risks that could cause their cost of funding to spike or trigger margin calls from derivative contracts. Few companies regularly evaluate the potential impact of credit risks produced by delays in payments or cancelled deliveries of products that have already been paid for. Or they fail to examine the potential impact of operational interruptions that could require funds or harm a company's ability to generate cash.

2. **Overlooking tail events.** The second most common mistake is that companies rarely analyze what could happen if a risk event occurs that is outside of their regularly considered range of possibilities. Most businesses examine if they have sufficient financial strength to weather an event that has somewhere between a 1 percent to 5 percent chance of occurring. But few conduct stress tests and scenario analyses to understand the potential impact of

so-called “tail” events that are outside a company’s regularly considered risk purview.

Or they analyze tail events in a mechanical way. They don’t bring into consideration the views of external experts or even tap all of the business intelligence that may exist within their own organization’s four walls.

3. Underestimating the importance of time.

Another frequent error is that companies fail to consider how their exposures change over time. Most calculate their potential liquidity shortage over one quarter and then apply those requirements over a year’s time. Or they ignore this step entirely. As a result, they fail to take into account how much their liquidity requirements could rise when their company pays dividends, for example. Or conversely, businesses may be unaware that they will need fewer reserves at other points in the year.

For example, the European Union voted in January 2013 against a plan to support the European Trading Scheme (ETS) for carbon and auction off yet more carbon credits. If the announcement had come several weeks later, it could have resulted in a full-blown liquidity crisis for many traders. As it was, after the announcement, carbon prices went into free-fall, dropping by 40 percent, and triggering hundreds of millions of dollars in margin calls on hedges. Traders were only able to meet their commitments by borrowing in the short term from their dividend reserves. Had the dividends already been paid and those reserves been depleted, many traders would not have been able to weather the shift as easily.

4. Misjudging funding risks. Trying to understand the risks associated with the uses of liquidity is a common process for risk managers. But issues such as the availability of funding and the associated

risks come less easily to them. As a result, few companies regularly assess the potential funding and liquidity problems that could result if lenders shut down credit facilities or if corporate treasuries cut funding for subsidiaries.

But paying greater attention to potential funding shortfalls caused by unexpected moves by counterparties is becoming critical. Banks and investors are increasingly worried about high debt levels and weak earnings in the current uncertain economic environment. In fact, some prominent independent traders have already begun to report that counterparties are starting to trim their credit lines.

5. Operating in silos. Intuitively, it may seem obvious that liquidity risk is too interconnected, complex, and potentially fatal to be analyzed by a single division. Yet seven years after the financial crisis, many companies still assign the responsibility of monitoring liquidity risk either to the risk division, since it is closely tied to market and credit risk, or to their treasury, since liquidity risk relates to working-capital management and funding. Firms often assign tasks such as calculating liquidity risks, setting liquidity reserve requirements, and determining funding requirements and provisions to a single division or spread out the work across segregated teams in silos that don’t communicate with each other.

This failure to collaborate causes significant gaps in companies’ liquidity-risk analyses. Perspectives from a company’s treasury department are critical to determining cash allocation and funding. But these insights fall short of identifying a firm’s actual liquidity risk without the risk division’s view on potential fluctuations in cash inflows and outflows and the financial planning division’s assessment of the firm’s future minimum liquidity requirements.

A MULTIDISCIPLINARY APPROACH

So what can be done? Ultimately, companies' chief financial officers and chief risk officers need to work together to ensure that their risk, treasury, and financial planning divisions are interacting with each other to assess the company's liquidity requirements, potentially as part of their annual planning and budgeting process. By taking advantage of the expertise that exists across the company, they can be sure they are considering all potential risks to funding.

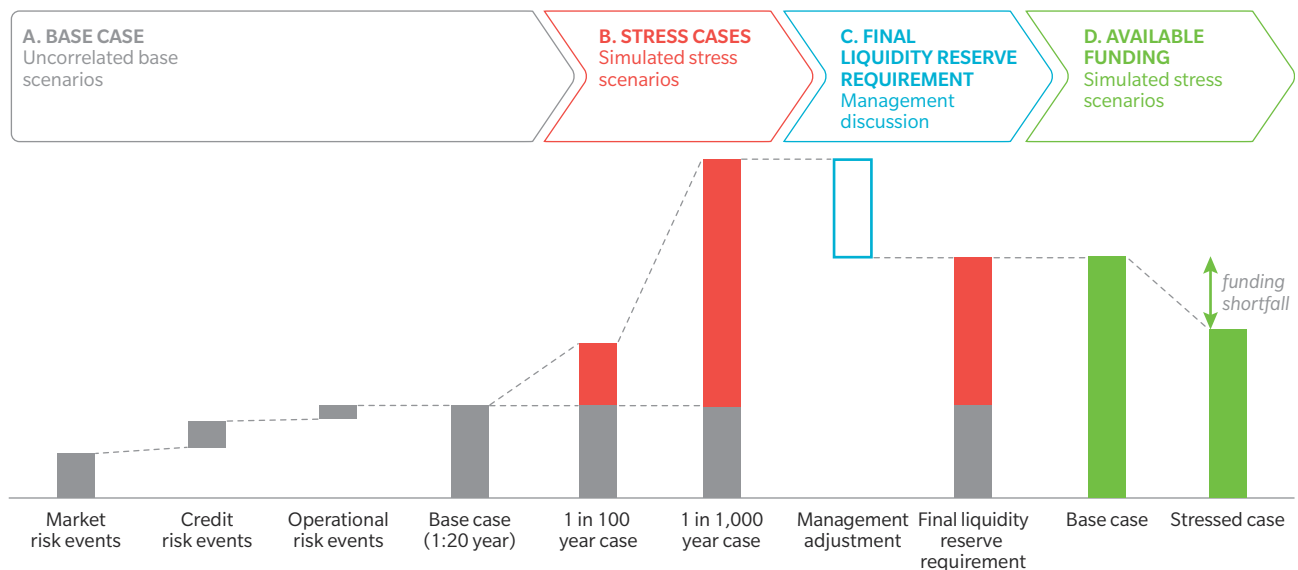
Leaders in this area include in their multidisciplinary analyses improbable and unforeseen events. They compile an exhaustive risk register across divisions, which include assessments of different types of liquidity risks,

and then assess their likelihood, impact, and potential interplay with other risks. (See Exhibit 2). Then they evaluate what the company's liquidity requirement will be when major liquidity risk events occur that could happen once in 20 years, once in 100 years, or once in 1,000 years. These individual reserves are then aggregated to give the total base and stressed liquidity requirement.

The company's top management team can then adjust the company's final reserve requirement based on the company's risk appetite and its willingness to pay for cash reserves or unused credit lines. By matching the requirements for "business as usual" against a stressed funding scenario, the management team can gain a more accurate picture of how large a funding shortfall should be addressed.

EXHIBIT 2: FORECASTING FUNDING SHORTFALLS

COMPANIES MUST ADOPT A MULTIDISCIPLINARY APPROACH TO IDENTIFY THE FULL EXTENT OF THEIR FUNDING SHORTFALL



Source: Oliver Wyman Analysis



ADDRESSING FUNDING SHORTFALLS

Once companies grasp the full extent of their potential funding gap, they can create a strategy for changing the way they address potential shortfalls in financial resources and incorporate these shifts into their overall strategy for managing risks. But developing such an integrated approach can only happen if companies attempt to bring the limits associated with their reserve calculations in line with their changing appetite for risk and overall funding plans.

Companies must examine a wide range of scenarios to determine both the cost of different sources of funding and the likelihood

of their access to financial resources. For example, companies should be prepared for separate divisions to draw down on reserves at the same time and examine how internal transfer prices and competition for funding could affect funding availability.

Finally, a company's chief risk officer must work with its chief financial officer to calculate and monitor the firm's financial resources. They must form teams responsible for liquidity risks in their risk, financial planning, and treasury divisions. Otherwise, corporations will not just remain vulnerable to the next financial virus, they may even exacerbate it, fulfilling the words of Spanish-born philosopher George Santayana that "those who do not remember the past are condemned to repeat it."

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