

A holistic approach to financial risk management is imperative for a treasury team to achieve both its strategic and operational objectives. A best-in-class risk management programme spans from organisational alignment and policy design to accounting, reporting and monitoring. The following steps should be considered in order to build a robust framework:

- ◆ Strategic and quantitative assessment of financial risk exposures;
- ◆ Efficient implementation of the desired hedging strategy;
- ◆ Compliance with accounting and derivative regulatory requirements;
- ◆ Robust settlement and transaction management process; and
- ◆ Monitoring performance, effectiveness and compliance with treasury policies.

Strategic and quantitative assessment

During the identification and evaluation process, treasury professionals should not only focus on specific exposures, but also assess the relationship between these exposures and their impact on the financial and business profile of their organisation. Hedging each exposure independently can result in an increase to the overall risk if an exposure that is naturally offset by another is hedged. For example, companies may choose to hedge one currency exposure because of its impact on a large subsidiary without considering its risk-reduction impact across the entire organisation. In addition, it can be cost-inefficient since a smaller number of hedging activities can achieve higher risk mitigation than a large volume of transactions.

More specifically, the following steps should be followed during the assessment phase:



THE WHOLE STORY

**WHAT'S THE SECRET TO BUILDING A STRONG RISK MANAGEMENT FRAMEWORK?
GEORGE KARALIS EXPLAINS**

- ◆ Review existing risk management framework;
- ◆ Benchmark against peer group companies with similar risk profiles;
- ◆ Gather reliable data such as existing and forecasted (business and financial) exposures;

- ◆ Construct the appropriate key performance indicator – a metric at risk (EBITDA, cash flow, financial covenants, etc); and
- ◆ Quantify, by analysing the data, the impact of different market movements to the relevant metric/s at risk.

Analysis of the risk exposures, especially for organisations with multiple risks, should ideally be performed using Monte Carlo analysis. This is a risk management methodology that takes into account correlations between different variables and simulates a wide variety of potential outcomes. The results of this analysis are often highly informative and sometimes counterintuitive.

Examples of risks that could be explored are:

- ◆ FX translation and transaction risk;
- ◆ Commodity risk as a stand-alone or given certain FX exposures;
- ◆ Interest rate and refinancing risk;
- ◆ Inflation risk; and
- ◆ Counterparty risk.

During this first step, several ingredients are required in order to successfully assess strategic financial exposures. These are independent views, technical knowledge and experience from similar engagements. A technology solution that has exposure management capabilities can also be used in this phase in order to continue performing the strategic analysis on an ongoing basis.

Hedging strategy

Following the evaluation and analysis process, the next important step is the implementation of the desired hedging strategy, which helps to mitigate the identified risks. The strategy should be practicable and cost-efficient. During the implementation stage, expertise and independent views, along with the use of sophisticated pricing models, are of utmost importance in order to ensure efficient selection of tools, fair and transparent hedging cost and consistent documentation. It is worth mentioning that, in recent years, the knowledge asymmetry between leading market makers of derivatives

and typical, or even best-in-class, end users has increased – mainly due to the complexity resulting from bank regulation. The concept of fair market price for a derivative transaction is not easily defined any more.

The design of the optimal hedging strategy should take into consideration the following factors:

- ◆ Risk tolerance levels of senior management;
- ◆ Selection of optimal hedging type or combination of types, hedging tenors, hedge ratios, mix of hedged and unhedged exposures;
- ◆ Cost of hedging programme – the composition of derivatives pricing has become more complex. It includes, among other elements, execution, funding valuation adjustment, credit risk (credit value adjustment (CVA)/debit value adjustment (DVA)) and return on capital;
- ◆ Counterparty documentation – it is critical to include clauses (credit breaks, mutual breaks, mark-to-market reset, etc) that minimise counterparty risk and ensure flexibility. The benefits and costs of collateralisation can also be considered;
- ◆ Financial covenant definitions or hedging constraints in debt documents – generally speaking, debt documentation negotiations and hedging strategy discussions should happen in parallel; and
- ◆ Hedge accounting and regulatory constraints – failure to properly consider these items can result in unintended treatment in financial statements.

Streamlined operations

Following the execution of a successful strategy, the

Integrated, automated hedge accounting solutions can help to streamline processes

THE FINANCIAL RISK LANDSCAPE

The market landscape around financial risk management has evolved rapidly during recent years and has grown to be more complex. The response from the regulators to the financial crisis has been to design a framework that is both transparent and demanding from an information and process point of view. Central bank intervention in the money markets and currency markets has resulted in relationships between asset classes that had not been evident in the past. Bank institutions have experienced deterioration in credit quality and have less credit appetite and fewer resources, but at the same time, their return-on-capital requirements have increased.

In this landscape, the role of the treasury department has grown to be even more critical and diverse. Dealings and exchange of information with both internal stakeholders (senior management, financial control, procurement, etc) and external stakeholders (banks, auditors, regulators, etc) have become more demanding and time-consuming. Senior management and shareholders have become even more engaged in reviewing the risks that could impact the financial health of the organisation. So they have aligned their objectives with the treasury department by ensuring the existence of a robust risk management framework and constantly monitoring compliance with that.

settlement process is a phase that requires best practices and streamlining of operations.

It also requires the use of a robust technology platform that enables:

- ◆ Trade execution;
- ◆ Management of business and financial exposures;
- ◆ Debt, derivative valuation, sensitivity and reporting capabilities;
- ◆ Document management; and
- ◆ Hedge accounting.

A technology platform will enable the treasury team to build integrated and centralised processes that offer automation and time efficiencies.

Technology should also be combined with expertise so that treasury can produce high-quality information, interpret this information appropriately, and discuss the technical considerations in order to meet the demanding requirements of internal compliance, auditors and regulators.

Obtaining optimal accounting for the hedging transactions is important to minimise profit and loss volatility, and

treasury departments need to be familiar with the applicable hedge accounting rules (ie IAS 39, *Financial Instruments: Recognition and Measurement*, IFRS 9, *Financial Instruments*, FRS 102, *The Financial Reporting Standard Applicable in the UK and Republic of Ireland*, ASC 815, *Derivatives and Hedging*, etc).

More specifically, treasury accounting teams need to have the infrastructure in place to navigate through complex accounting standards, draft hedge designation memos, run hedge effectiveness tests and calculate CVA and DVA for their derivative portfolios. Administering a hedge accounting programme can become a burden if it is done manually or using spreadsheet-based solutions. Integrated, automated hedge accounting solutions can help to streamline processes and reduce both the risks and costs of maintaining the programme.

If the pricing system that is used in the calculation of the CVA/DVA valuations for accounting purposes applies the potential future exposure method, it can also be used as a sophisticated counterparty risk monitoring tool.

In addition to the above, recent regulation affecting derivatives (Dodd-Frank and the European Market Infrastructure Regulation) requires treasury teams to have the ability to report transactions to trade repositories, exchange confirmations in short timelines, value and perform reconciliations of their derivative portfolios on a frequent basis and, for certain types of institutions, even proceed with collateralisation. The implementation of an automated solution to ensure adherence to regulatory requirements is recommended.

Effective financial risk management

In recent years, the concept of financial risk has been readdressed. This presents an opportunity for treasury and risk management teams to solidify and enhance policies and procedures. The treasury team has strategic and operational objectives, such as managing uncertainties, controlling costs and adding value to the business.

Meeting these objectives can be achieved through a combination of expert skills, independent views and integrated solutions through sophisticated technology platforms. Treasury teams that work with providers that not only offer a technology platform, but also combine this with expert advice, will have a competitive advantage. This is because they will receive the necessary support during each step of the process of building a strong risk management framework. ♦



George Karalis is a financial risk adviser at Chatham Financial

