



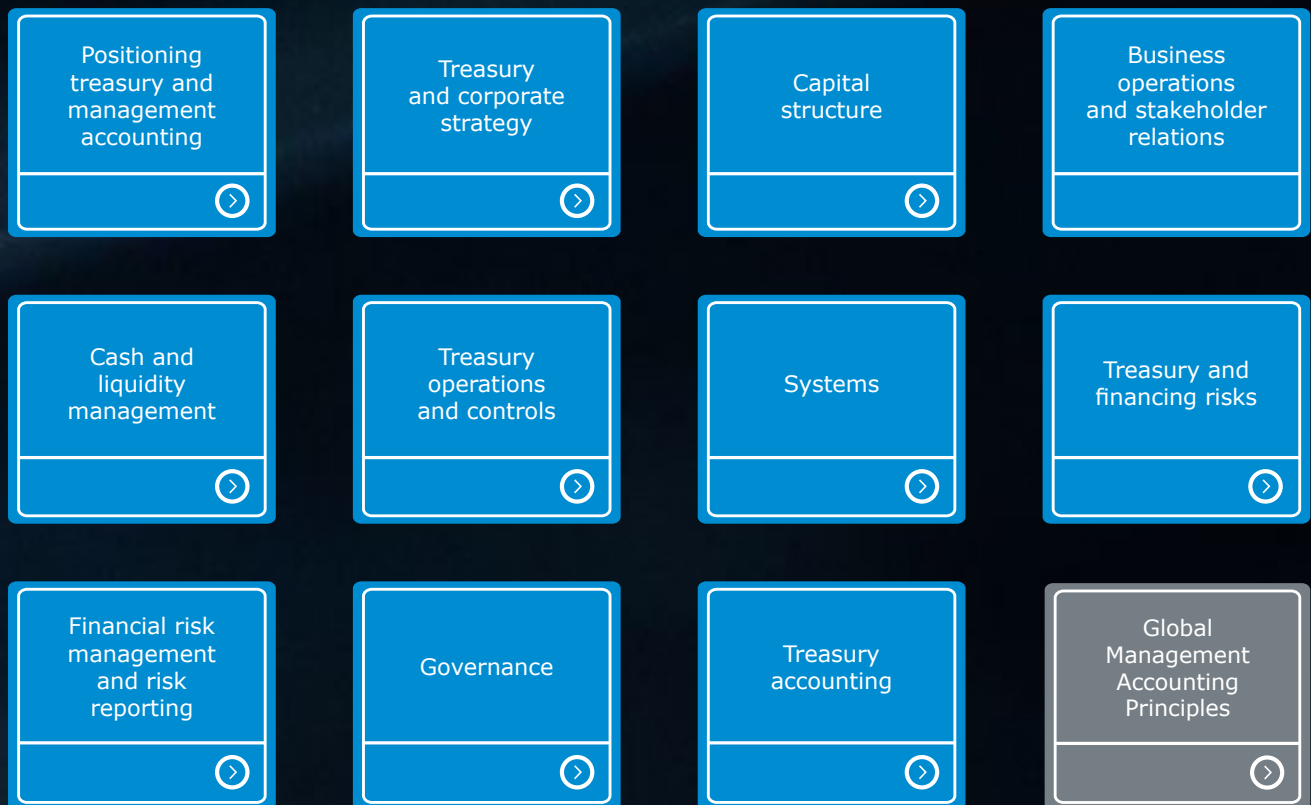
TREASURY AND CASH MANAGEMENT ESSENTIALS

The interface between business and its financial providers

THE ASSOCIATION OF INTERNATIONAL CERTIFIED PROFESSIONAL ACCOUNTANTS

The Association of International Certified Professional Accountants (the Association) is the most influential body of professional accountants, combining the strengths of the American Institute of CPAs (AICPA) and The Chartered Institute of Management Accountants (CIMA) to power opportunity, trust and prosperity for people, businesses and economies worldwide. It represents 650,000 members and students in public and management accounting and advocates for the public interest and business sustainability on current and emerging issues. With broad reach, rigor and resources, the Association advances the reputation, employability and quality of CPAs, CGMAs and accounting and finance professionals globally.

TREASURY ESSENTIALS



ASSOCIATION OF CORPORATE TREASURERS (ACT)

The Association of Corporate Treasurers (ACT) sets the global benchmark for treasury excellence. As the chartered body for treasury, it leads the profession through internationally recognised qualifications, by defining standards and championing continuing professional development. It is the authentic voice of the treasury profession, educating, supporting and leading the treasurers of today and tomorrow.

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INTRODUCTION

Whether it knows it or not, almost every business of any size ‘does’ treasury: the administration of its financial assets and holdings with the aim of optimizing liquidity, ensuring the right investments are made and reducing risk.

Treasury practices have become significantly more complex since the global financial crisis. The landscape is abounding in uncertainty and risks. At the same time, big data and value chain financing are providing new and powerful opportunities to evolve how organizations ‘do’ treasury.

The dynamic nature of treasury is challenging those responsible for it. With its emphasis on cash, risk and markets, treasury differs from other finance activities. The complexity of instruments, systems and interactions with the business, both operationally and strategically, means that some of the skills needed for treasury are specialized.

Management accountants who have treasury responsibilities are dedicating more time to working across financial and non-financial units, leading the culture of risk management and developing and challenging shareholder and economic models.

This guide highlights the need for close alignment, understanding and cooperation between the management accounting, tax and treasury functions when making decisions on investments, funding and risk strategies.

As guardians of organizations’ assets, management accountants have responsibility for stewarding liquidity, optimizing capital structures and supporting the execution of strategies that generate value for all stakeholders. Particularly since the 2008 global financial crisis the treasury function of any organization is operating in a much more complex environment in which to generate value. Management accountants must update their skills and competencies to cope with this new norm.

The Global Management Accounting Principles developed by the AICPA and CIMA underscore the importance of this stewardship role in both large and small organizations. The Principles outline the importance of relationships and communication that drives better decision making. They also provide guidance on the process of presenting the insight gained from analyzing relevant information that is critical to the value creation process.

The Global Management Accounting Principles identify fourteen practice areas that make a contribution to the process of creating value. While there are interdependencies among all elements of strategy and finance, the key practice areas that this document expands upon include:

- Treasury and Cash Management
- Financial Strategy
- Investment Appraisal
- Risk Management

Written in partnership with the Association of Corporate Treasurers (ACT), the chartered body for treasury, and drawing on its technical expertise and treasury competency framework, this treasury resource will prove invaluable to management accountants who recognize these new challenges and wish to develop the capabilities to take advantage of the related opportunities.

1. POSITIONING TREASURY AND MANAGEMENT ACCOUNTING

The key role of the treasury function is to advise the Board and management on business decisions and financial considerations that are fundamental to corporate strategy. Securing financing, maintaining funding and managing risks are essential treasury skills that enable the execution of that strategy.

Every organization deals with treasury issues, but many organizations do not have a distinct treasury function. Treasury may mean a discrete practice within an organization or part of the responsibilities of a management accounting function. Similarly, the role of Treasurer may be a discrete role or may be part of the responsibilities of a broader role such as Financial Controller or CFO.

At the strategic level, treasury is about advising on the appropriate choices, trade-offs and compromises involved when financial decisions are taken. Three strategic and interrelated questions are fundamental to treasury decision making:

1. What should we invest in?
2. How do we fund these investments?
3. How do we manage the risk of our choices?

‘Investing’ refers to any use of resources for future benefit. It covers not only acquiring property, plant and equipment, M&A and intangible assets like patents, know-how and brands, but also R&D, staff training and marketing programs.

Even if not explicitly, management accountants address these questions on a routine basis because they are the foundations of business strategy development. Different organizations will have different financing considerations, as there will be different answers to these three questions. (Naturally, a utility company and a confectionery manufacturer will have very different responses.) The time horizons they take into account and the risks they need to manage may be different too, whether because of the nature of the business or the type of financing chosen. It is impossible to take sound decisions about any one of these questions without influencing or being affected by the answers to the other two. In other words, they are interdependent.

The answers to all three questions also depend on external factors, often interrelated, which can further increase uncertainty. Some strategic choices that may seem straightforward on the surface actually conceal unforeseeable consequences. Accordingly, judgment is constantly required – from the outset and as conditions change.

2. TREASURY AND CORPORATE STRATEGY

Business strategy and financial strategy together form corporate strategy. Financial strategy depends on the business strategy – but business strategy is enabled or constrained by the financial strategies that are available.

Figure 1: Corporate strategy



Business and financial strategy

What do we invest in, how do we fund those investments and how do we manage the risk of our choices?

These questions are central to the development of business strategy and to the financial criteria for investing. It is essential that the investments will earn enough to cover the cost of funding them and to compensate for the risks involved.

Treasury plays a key role in determining the organization's financial strategy, working out how to finance the business strategy and how to manage the risks that follow from this. It sets out what is possible financially, at what cost and with what risks as the business and the environment evolve.

Corporate funding

An organization needs capital to fund its present assets, its planned future development (including an allowance for opportunistic investment) and to absorb the cash-flow effects of responding to unexpected shocks (whether internal or external).

There are three primary sources of funding: the use of an organization's own cash reserves generated from accumulated surpluses; loans; and equity.

Equity is the best shock-absorber, as it places few demands on the organization's various cash flows. Debt funding via a loan involves compulsory interest and the eventual repayment of the amount borrowed, either from the business's cash flow or from new funding raised via debt or equity.

Other funding strategies that businesses can deploy include asset-based financing, leasing and working-capital financing.

Key questions to consider – Start the dialog

In raising funds, consider:

- To which types of funding and fund-providers does your organization have access?
- Should additional finance be raised as equity, debt or a combination of the two?
- Does what is being invested in lend itself to asset-based finance in other words; could it be rented or leased and at what cost?
- Are there other existing assets that could be financed more easily, releasing funds for the new investment?

Strategic and financial risk management

The risk management system covers the providers of funds against risks.

Key questions to consider – Start the dialog

- Are the risks from the actual investment acceptable, when compared to the business to which it contributes?
- Is the cash-flow impact of servicing and repaying (equity aside) the funding and any associated conditions (such as covenants and default wording) both acceptable to and manageable by the organization and those who provide its funding?
- Is the overall business risk, including the total funding and cash-flow risks, acceptable to and manageable by the organization and the fund-providers?

Getting ahead – The management accountant's perspective

Management accountants should be aware of the range of possible risks and how they might be mitigated in evaluating the financial feasibility of strategic options, covering a range of realistic scenarios. Examples might include risks arising from movements in interest rates, foreign exchange rates, commodity prices and inflation. If, for example, a plan cannot be funded in its current form, the treasury function should suggest modifications to the plan or phasing it in over a longer period.

Some risks will be managed through structural decisions about the business. For example, the location of new plant may affect currency exposures, access to finance or the security of supply for input commodities. Other factors, such as sourcing decisions and flexibility in the sourcing of materials, components or finished goods, will also affect how risk is managed.

Other risks will not be subject to such structural solutions, but may be addressed through contract negotiation. For example, the pricing formulae in contracts may permit adjustments for changes in interest rates, exchange rates or commodity prices. Other risks will be accepted, monitored and managed.

Financing guidelines and policies

Overall guidelines for financing and for managing financial risk are derived from the financial strategy. These then set the approach to funding, managing currency and interest rate risks, investing surplus funds, setting counterparty limits and more. Such guidelines therefore ultimately enable the creation of treasury policies.

Key questions to consider – Start the dialog

- Are your financial strategies integrated with your business strategy?
- Are your treasury objectives clearly defined and aligned with your organization's objectives?
- Do your treasury policies accurately reflect those objectives and address any risks to reaching them?

3. CAPITAL STRUCTURE

Externally raised capital may be debt or equity, although hybrid structures can also be created. Capital-structuring theory and market practice provide many techniques for optimizing an organization’s capital structure.

An organization’s financial strategy assesses the optimal financing solution, based on the following three factors:

1. Ranking of capital – the ease and cost of financing
2. Leverage – how to measure and monitor leverage
3. Markets – the diversity of sources and the maturity of financing.

Gearing or leverage

The proportion of total capital that is debt is called ‘gearing’ or ‘leverage’. The optimum level depends on the organization’s risk and return dynamics. Higher levels of debt increase the required return on equity (the cost of equity to the organization), which is classically offset by the increased amount of the relatively cheaper debt.

By maintaining a gearing or credit-rating target, an organization is able to position its creditworthiness in the funding markets, optimizing sources, pricing and terms for funding.

Considerations for some organizations may be the tax treatment of loan interest, equity dividends, and (under the G20 Base Erosion and Profit Shifting [BEPS] proposals) the amounts and locations of debt.

As shown in Figure 2, the overall cost of funding – the weighted average cost of capital – increases with higher gearing (as well as with the riskiness of the business strategy). At some point, investors are likely to become concerned about return of capital (not return on capital): in such cases, new funds are refused whatever the price offered. In squeezes and panics, such a refusal may arise at much lower gearing levels, leaving some organizations that were previously financeable now incapable of finding finance.

Figure 2: Gearing levels

(Curves are intended to illustrate the concept and do not represent costs for any particular company)

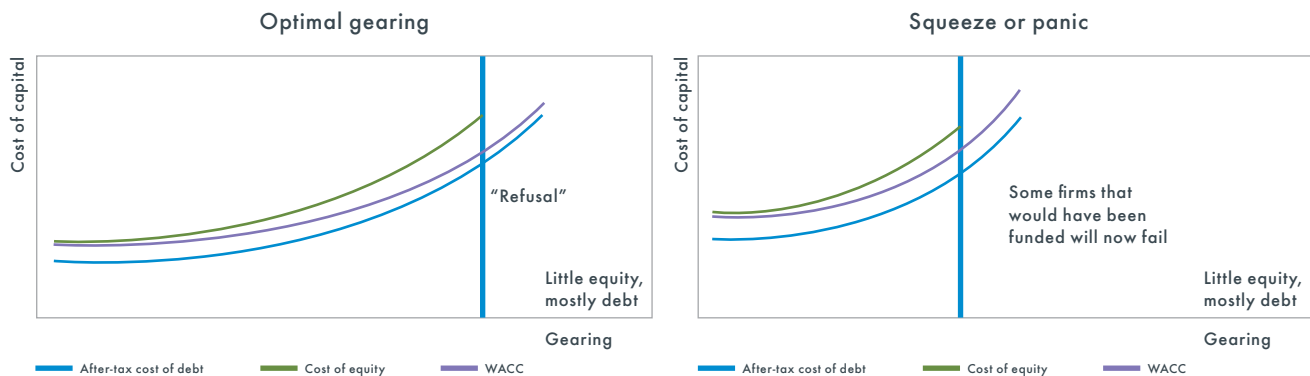


Figure 3: The effects of gearing/leverage

Ung geared returns from the business. (After business tax.)	Geared cost of capital for AA-rated firm (After business tax.)		Ung geared returns from the business. (After business tax.)	Geared cost of capital for B-rated firm (After business tax.)	
Return on Assets 12.8%	Debt 30%	Equity 70%	Return on Assets 12.8%	Debt 70%	Equity 30%
	Cost 4.0%	Return 16.6%		Cost 8.0%	Return 24.0%

If the return on assets is unchanged, businesses might find the effects shown above when moving from stronger credit (less debt) to weaker credit (more debt).

Corporate borrowing

Riskier businesses or those with shorter-lived assets will tend to rely more on equity and only borrow over the short term if at all (perhaps for a quarter or a year).

Organizations with more stable cash flows and longer-term assets will be more comfortable servicing debt and so are likely to borrow for proportionately longer periods. For example, a building may be 65% debt-financed, out to 30 years, with the (supposedly) reliable rental income servicing both the debt and equity.

Some loss of control by shareholders can be a non-cash cost of debt. This is because covenants in lending contracts can cause constraints meaning that lenders can ultimately take control.

This loss of control may be too risky for some organizations, so they choose to avoid debt. Examples include businesses like high-tech, nano-tech or bio-tech companies with high real-option values that are dependent on further development being undertaken by hard-to-find experts.

Other organizations deliberately choose a high gearing strategy, such as the use of structured finance, hybrid instruments, project finance or private-equity deals.

The availability of funding cannot always be relied upon, as banks' risk appetites vary depending on market conditions. This can impact the industries, credit standings and even the geographical regions to which banks are willing to lend. Organizations will therefore need to plan the raising of new funds well ahead of when they need them, to diversify their sources of funding and to 'warm up' potential investors and lenders in advance. Few organizations that have the ability to choose would leave the refinancing of significant committed outlays or debt maturities to the final 18 months before the requirement crystallizes.

Table 1: Main funding types and their characteristics

Factor	Equity	Bonds	Loans/ Bank Debt
Return on funds	No obligation to return funds.	Bonds must be repaid on maturity.	Bank debt must be repaid upon maturity.
Relative cost	High	<ul style="list-style-type: none"> • Low • Fixed interest rate. 	<ul style="list-style-type: none"> • Low • Almost always at a floating rate.
Information disclosure	None	<ul style="list-style-type: none"> • Investment-grade bonds have fewer conditions and generally no financial covenants, unlike loans/bank debt • Sub-investment grade ('high yield') bonds involve more covenants. 	<ul style="list-style-type: none"> • More private than equity and bonds, but the amount of required information is high, often including business plans.
Covenant requirements	None	<ul style="list-style-type: none"> • Investment grade bonds have fewer conditions and generally no financial covenants compared to loans/bank debt • Sub-investment grade ('high yield') bonds have more covenants. 	<ul style="list-style-type: none"> • More covenants and more onerous even for investment-grade borrowers • It is easier and cheaper to discuss amendments with banks than with possibly unknown bond holders.
Flexibility of usage	Poor	<ul style="list-style-type: none"> • Fairly poor. 	<ul style="list-style-type: none"> • Good • An amount can often be drawn and repaid at will in revolving facilities, unlike in a term loan.

Asset-based finance

Some assets lend themselves to dedicated finance, often called 'asset-based finance', while some items can be leased instead of owned. Some assets, such as land and buildings or expensive equipment, are good security for a provider of acquisition funds. On the working capital front, supplier-led invoice discounting or factoring (the sale of receivables) and 'supply-chain finance' (where the buyer leads the process) can all be useful. But it must be noted that the more asset-based finance an organization uses, the less asset value remains to support credit taken from other lenders, trade creditors and employees for unpaid salaries. This can change the attitude of those creditors.

An old saying, 'fund early and fund long', remains true. Organizations need to work harder than ever on their funding relationships – not just bank relationships, but all the increasingly diverse potential sources of funding, including private placement debt, direct lending and asset-based finance. Funding plans need to explore all options and use creative thinking. Alternatives such as crowdfunding (equity), peer-to-peer lending (debt) and specialist FinTech service providers are increasingly credible sources of financial solutions for businesses.

4. BUSINESS OPERATIONS AND STAKEHOLDER RELATIONS

Effective treasury requires a thorough understanding of the organization's business model and its industry. Developing strong relationships with internal and external stakeholders alike builds credibility and trust in treasury and financing operations.

Business operations

The level and nature of business risks and their impact on cash flows have a material impact on key treasury activities such as managing capital structure, funding and liquidity and financial risks. It is important that those responsible for treasury thoroughly understand the business model and the industry sector within which the organization operates, while supporting and enabling the organization's business operations and strategy.

Management accountants responsible for treasury activities must stay close to operational management to ensure they understand their view and demonstrate that the interdependency of business strategy and financial strategy is acknowledged by both parties.

For example, whenever an organization issues a tender or price list with foreign currency content and/or with foreign currency costs in the supply chain, the treasurer should understand the risks involved. By working closely with the procurement function, the treasurer can facilitate the debate on whether to procure from one country over another. When a new project or investment is being considered, the treasurer can also give guidance on financing rates, discount rates, entity structuring, cash investment and repatriation, sources and structuring of finance and their impact on the company's credit rating.

Equally, when the treasurer talks to lenders in the capital markets, understanding both their own sector and that of their lenders is crucial. They should know how each organization compares to its peers as well as to the wider market for risk and return. For example, organizations with high business risk are less likely to take significant financial risks. On the other hand, stable organizations with high-quality earnings may take more financial risks.

Stakeholder relations

Whether it has a dedicated treasury function or not, every business 'does' treasury – often without realizing it. Treasury interfaces with a range of business stakeholders, and it is vital that the management accounting, tax and treasury functions are all properly aligned and mutually supportive. Treasury is a specialist practice that focuses on the security of funding, the liquidity of the business and the yield from investments; as such, it is vital to effective and trustworthy management accounting. To do its job effectively, treasury (however it is structured) relies on building credibility and trust, both throughout the business and externally.

Figure 4: Treasury relationships



Management accountants responsible for treasury will have relationships at all levels in the business, from the CFO, Board members and (in larger or listed companies) Board Committees such as Audit and Risk Management, downwards through divisional management to the line staff running day-to-day operations and processes. Across other business functions, strong relationships are formed with tax, commercial, legal and other support functions as well as those running pension or employee-benefit schemes.

Externally, treasury professionals articulate the organization's credit strength and its strategy and model for value creation. They also ensure that the business is at all times provided with the financial products and services it needs, from high-quality sources and at an appropriate post-tax cost.

Typical external relationships include not only lenders and potential lenders, but also publishers of credit ratings, external accounting, tax and other advisers, systems and information providers, insurers, employee-benefits providers, government agencies and auditors. Since the 2008 global financial crisis, regulation, market forces and technology have been among the factors which have driven fundamental and far-reaching changes in the provision of finance. For this reason, external relationships are every bit as important as internal ones.

Own credit risk

Presenting and explaining your own organization's credit standing to external parties will influence their willingness to do business with you and the terms they will demand. This applies to your suppliers, your lenders and lessors alike. Even your clients and customers will want to assess the likelihood that you will still be in business to honor your commitments in the months and years ahead.

Larger organizations that issue publicly traded bonds may have a formal credit rating from international credit-rating agencies. Almost all organizations will find they have at some point been assessed by a credit-reference agency, an organization that performs a fairly mechanized analysis of publicly available information such as annual accounts, invoice-payment histories and court orders.

Credit analysis will start with an organization's historical performance, supplemented with forecasts, projections and perhaps an audit of assets. Analysts typically consider the quality of an organization's senior management, the credibility of their strategy and its financial flexibility when developing their forecasts.

The business plan and cash flow should be stress-tested in a variety of scenarios to demonstrate the business's compliance with loan covenants, re-financing abilities and other limiting factors. Credit analysts focus on how the organization controls potential downside risks. They are less interested in outperformance on the upside, which is more the domain of equity analysts.

Getting ahead – The management accountant's perspective

Managers need to understand how their organization appears to a lender, including not only their credit profile but also the economic business case where lending is part of a wider relationship. Management accountants should actively manage the credit standing of their organization and routinely report it in their management information. The initiatives, activities and processes that drive the organization's credit standing should form the basis of the 'narrative' that explains how the credit standing is achieved and how the business plans to sustain or improve it. This narrative might include the ratings agencies involved, the relationship-management initiatives and processes that are in place with them and the factors that they assess.

Tool: Credit Agencies

5. CASH AND LIQUIDITY MANAGEMENT

Liquidity is access to cash. Its management is the most fundamental element of treasury management — if it fails, the organization cannot continue to function.

Cash and liquidity forecasts

Liquidity enables an organization to do two things: to pay its obligations where and when they fall due; and to source additional funds to meet further obligations. Successful liquidity management therefore depends on having an insight into the business's future cash-generation or absorption – a cash forecast. Cash forecasts are fundamental to a liquidity strategy, with the treasurer often looking ahead over several timeframes to manage liquidity.

Liquidity risk can be analyzed by time frame:

- Operational liquidity risk focuses on short-term needs arising from day-to-day operations
- Strategic liquidity risk focuses on longer-term risks and the need to ensure that the business can continue and can support changing business plans in the future.

Day-to-day cash forecasts are usually driven by receipts and payments data from the accounts receivable and payable ledgers, interest and tax information, and net profit/performance reporting. They generally cover the period from the day they are created until up to 30 days later. While treasurers in highly geared or volatile businesses often value them greatly, some of their peers in cash-rich or cash-generative businesses do not use short-term forecasts at all. However, the need to optimize the investment of surplus cash means more companies are requiring them today than in the past.

Medium-term forecasts often extend to a 'rolling' year. They allow the planning of 'big ticket' items such as capital expenditure, tax and dividend payments and funding maturities. They feed into some aspects of forecasting compliance with financial covenants. These forecasts are based on stress-tested business plans and only attain credibility when supported by realistic targets for performance measures such as surplus, working capital efficiency (e.g. debtor days, creditor days and stock turnover), asset utilization, tax settlements and dividend projections.

It is vital that management accountants work with treasurers to ensure that plans are 'bankable' – that

treasurers are confident of being able to secure the liquidity of the organization.

Long-term forecasts are an essential tool for identifying trends and overall cash generation or consumption over time. They are usually driven from plan data prepared by management accountants, and their timescales will typically extend from one year up to three, five or even ten years or more.

In many organizations, cash forecasting is not performed well. The forecasts are often too long, too short, not used or consistently inaccurate. From a practical perspective, the treasurer should monitor their accuracy by comparing actual data to forecasts, and then give constructive feedback to the business units providing the source data.

Key tools for managing liquidity are:

- **Cash management:** using cash generated by business operations, cash surpluses retained in the business and short-term liquid investments. The physical day-to-day management of cash ensures that payment obligations can be met
- **Working capital management:** managing supplier payments, receivables and inventories to optimize the investment in working capital
- **Organizing and managing borrowing facilities:** using cash-flow forecasts, building in planned/required new funding and maturing funding that must be repaid or refinanced.

Other tools include managing non-operational items such as capital expenditure, project investment, dividends and disposals.

These tools are all relatively short term, connecting the business with near-term liquidity. In the long term, a business will only thrive if it invests to stay competitive – just compare the performance of Kodak with that of Fujitsu. This stresses the importance of the strategic issues discussed previously. And an organization with little cash can remain liquid as long as it has the ability to borrow.

Tool: Cash Flow Modelling



Cash management

Cash management is part of managing liquidity.

The treasury function is responsible for ensuring that cash flows (receipts and payments) throughout the business are processed as efficiently and securely as possible. Optimizing bank charges and float (the period of time that a transfer is ‘in transit’) can save considerable amounts of money.

One way of doing this is by organizing bank accounts into ‘cash concentration’ or ‘notional pooling’ structures:

- Cash concentration (also called ‘zero balancing’) is the consolidating of bank account balances from a number of accounts into one account to offset interest income against expense.
- While notional pooling has the same resultant offset of interest, the bank instead creates a shadow or ‘notional’ position from all participating accounts; no actual movement of funds is involved.

Table 2: Cash management components

Day-to-day cash control (including intra-day where necessary)	This involves having the information to monitor bank account balances and the tools to manage liquidity so that the organization has enough cash or near-cash resources to meet its immediate obligations.
Money at the bank	Building an efficient bank account structure that minimizes overall borrowing costs, maximizes overall interest earned and facilitates liquidity management.
Receipts	This requires the maintenance of bank accounts that are optimized for collection streams and an efficient infrastructure for managing items during collection.
Payments control	This involves maintaining bank accounts that are optimized for making payments, whether routine or urgent, together with appropriate systems support.
Short-term investments	Optimizing the use of surplus funds by making short-term investments.
Short-term borrowings	The use of borrowing facilities to cover immediate funding shortfalls.

Inter-company payments can often be another source of lost liquidity and inefficiency, due to bank processing time (‘float’), foreign-exchange costs and bank charges. In-house netting systems, providing the ability to offset multiple positions or payments between parties, can significantly reduce these inefficiencies, especially for cross-border transactions.

Another way for organizations to make best use of systems, expertise and economies of scale is to aggregate external payments and collections by

outsourcing them. Payment factories, collection factories, in-house banks and shared service centers all use these and other techniques.

Since the global financial crisis, interest rates in many countries have remained relatively low. As a result, the values of cash holdings have been depreciating in real terms, and there is a substantial cost to holding cash. Organizations should regularly review the amount of cash they hold in conjunction with a formal cost/benefit analysis, and adjust the level accordingly.

Working capital management

Investment in working capital is part of doing business and is a factor in cash forecasting and funding plans. Higher working capital may ensure supply and boost sales and service levels, but at a cost. Lower working capital can reduce an organization's dependency on borrowing.

Broadly speaking, working capital is inventory and work in progress plus receivables less payables. A business can control it and the cash conversion cycle by adjusting the levels of inventory, supplier payment periods and the speed of collection of cash from customers. It might appear simple for an organization to quickly adjust its working capital to improve its cash position by, for example, delaying payments to suppliers. However, there are a number of risks and concerns associated with adopting this tactic, including the following:

- It is unethical to unilaterally extend payment terms that have previously been mutually agreed.
- It is unprofessional, showing up the inability of the management accounting or treasury functions to manage cash on a sustainable basis.
- It is unsustainable. The cash 'benefit' is illusory and transient. Even when overdue debt is eventually settled, the underlying fundamentals will not have been changed by this approach.
- It is bad for an organization's reputation, efficiency and effectiveness. Suppliers will respond by increasing prices, levying interest or withholding supplies.
- It can impact the viability of suppliers, smaller ones in particular.
- It can impact on the quality of goods or services, as suppliers sacrifice their investment into quality.
- It adversely affects an organization's credit standing, making debt financing more costly or harder to find.
- Suppliers are not banks; they are not in business to provide credit to their customers (or they would charge interest). Credit periods are for their customers' administrative convenience, giving customer organizations time to process deliveries, execute payment authorization processes and regularize their payments to suppliers.

Getting ahead – The management accountant's perspective

Management accountants should manage working capital by setting targets for its components. Targets might include:

- Increasing stock turnover
- Targeting better supplier pricing and payment terms
- Setting demanding credit-control targets.

These targets should be reflected in the organization's cash flow forecasts.

Cash conversion cycles differ from business to business. In a food supermarket, for example, which buys inventory for almost immediate cash sale, cash may flow in before suppliers have been paid. This is a negative cash-conversion cycle. In other industries, where inventory is held for some time, organizations may make supplier payments long before they receive cash from sales.

Figure 5: Cash conversion cycle

	Raw materials purchased	Payment made	Goods sold	Payment received
Days' inventory				
Days' receivables				
Days' payables				
Cash conversion cycle				

Tool: Cash Conversion Cycle



6. TREASURY OPERATIONS AND CONTROLS

Treasury operations are exposed to particular risks such as fraud, error and failures of markets and systems. They are particularly susceptible because of the large amounts of money involved, their ability to make payments and the potential complexity surrounding their activities.

Internal controls

Treasury functions vary in their composition and scope and in how different organizations allocate tasks. For these reasons, when considering operational controls it is generally better to emphasize underlying principles rather than the detail of specific controls and reporting systems.

Control procedures in treasury generally cover the following areas:

- Prior authorization and approval of financial transactions by delegated authorities.
- Segregation of duties (see below).
- Recording procedures, so that no transaction is omitted or recorded more than once.
- Safeguards for access to systems and documents.
- Reconciliation/ checking of records.
- Measurement.
- Reporting.
- Internal audit.

Segregation of duties is designed to prevent fraud and detect errors. It is an essential approach that means no transaction or payment, internal or external, is ever carried out without at least one other person knowing about it. In a treasury’s activities, this becomes a general principle so that those executing and recording transactions (the ‘Front Office’) must not confirm or settle those transactions (which is the responsibility of the ‘Back Office’).

Figure 6: Segregation of duties in the dealing process



Businesses must be aware of counterparty risk, and dealing limits should be rigorously enforced.

Measuring treasury operations encourages a focus on targets. While there are many possibilities, some of the more important measures and targets could be as shown in the table below.

Table 3: Suggested key performance indicators (KPIs)

Measure	Target
Number of unreconciled items in bank accounts	Nil
Time limit for exchange of confirmations	1 Hour
Number of confirmations sent/received that are not agreed	Nil
Trades made in error (such as being made the wrong way round)	Nil
Bank and dealing mandates up to date	100%
Passwords changed every week/month	100%

Treasury operations should report these and other agreed measures to the treasury function, Financial Controller or CFO against pre-agreed schedules or triggers.

Tool: Treasury Controls



Counterparty risk

Counterparty risk is the risk to each party to a contract that the counterparty will not meet its contractual obligations, where counterparty is the other party to a financial transaction.

Counterparty risk arising from exposure to banks and other financial counterparties is often much larger than credit risk from an organization's sales. Before the global financial crisis, some organizations paid scant attention to this, regarding banks as safe institutions. Times have changed: organizations are holding more cash, and banks' credit (from the corporate perspective) has become weaker.

Counterparty risk with financial institutions does not arise from deposits alone. It can be found in many other places including:

- Cash on local deposit by individual group subsidiaries
- Cash in the process of collection through any medium such as checks, wires, automated clearing houses or payment cards
- Cash in set-off arrangements such as notional pooling and concentration systems prior to final concentration
- Derivative contracts that are 'in the money' (i.e. those that are worth more than their replacement value in the market)
- Letters of credit, bank payment orders and bank guarantees (specifically the replacement risk in the event of a bank failure)
- Custodianship arrangements for investments
- General set-offs under contract or in local bank/ financial institution resolution practice or in internationally agreed bail-in actions.

The legal entity (and in some cases the branch involved) must undertake counterparty credit analysis. In addition to using overall ratings reports, including ratings outlooks, the treasury function should look at the individual credit ratings of domestic and foreign counterparties, as well as those assumed to be seeking government support. It is also important for treasurers to make a considered assessment of governments' ability and willingness to support their banks. However, ratings should not be relied upon exclusively as they can be slow to change and may effectively lag behind market events.

Getting ahead –

The management accountant's perspective

'Market Implied Ratings' (which estimate the probability of default by an individual, an organization or a country) can be very useful, as can share and bond-price movements. Another useful option is the equivalent Credit Default Swap or CDS pricing (a financial instrument for swapping the risk of the counterparty defaulting on a debt). CDS prices reflect much more than a debtor's credit standing, however.

Treasurers can use each of these indicators as a trigger to suggest a change in credit limits. Due to the speed of change in financial markets, the treasurer must be able to reduce such limits (and the exposure, if need be) immediately and without further referral.

When managing credit risk in investing, the treasurer's mantra is 'SLY': Security first, Liquidity second, Yield last. Yield can only be increased by taking on more credit risk or reducing liquidity. Credit risk can be reduced, for example, by diversifying counterparties and instruments. Typical approaches include:

- Using multiple banks with different characteristics for deposits, such as domestic, multinational and regional banks (in the UK, for example, Lloyds Bank, Deutsche Bank and SEB)
- Investing with non-banks, for example via government securities, directly in corporate debt such as commercial paper, or in diversified funds such as money market funds
- Larger corporates using repurchase agreements ('Repos'). This is where a security is purchased from the counterparty at the start of the contract and sold back ('repurchased') at the end at a higher price, thus creating a return on the purchase price. If the counterparty fails to honor its repurchase obligation, the purchaser can sell the security in the market to recoup some or all of its investment.

7. SYSTEMS

For treasury activities, the importance is growing of the technology that organizations use for automating processes, performing calculations, communicating with internal and external partners, monitoring risk and generating compliance reports.

Straight-through processing (STP)

The effectiveness of transaction processing is usually determined by the degree to which it facilitates straight-through processing (STP).

Straight-through processing is the efficient, secure and instantaneous flow of information:

- Within systems in the treasury department, such as the electronic confirmation-matching system that automatically updates deal-confirmation status in the treasury management system (TMS)
- With other internal systems, such as the automatic posting into the general ledger system of journal entries created in the TMS
- With other parts of the business, such as the capture of foreign exchange (FX) transactional risk by forecast FX transactions reported from subsidiaries
- With external parties, such as cash balances reported from banks or mandatory derivative trade reporting/reconciliation.

Treasury management systems

For large organizations, all treasury transactions should be recorded and managed within a treasury management system (TMS), which forms the heart of most corporate treasury technology infrastructures. While spreadsheets are commonly used for broad forecasting roles, proper risk management techniques are available in dedicated systems.

A TMS:

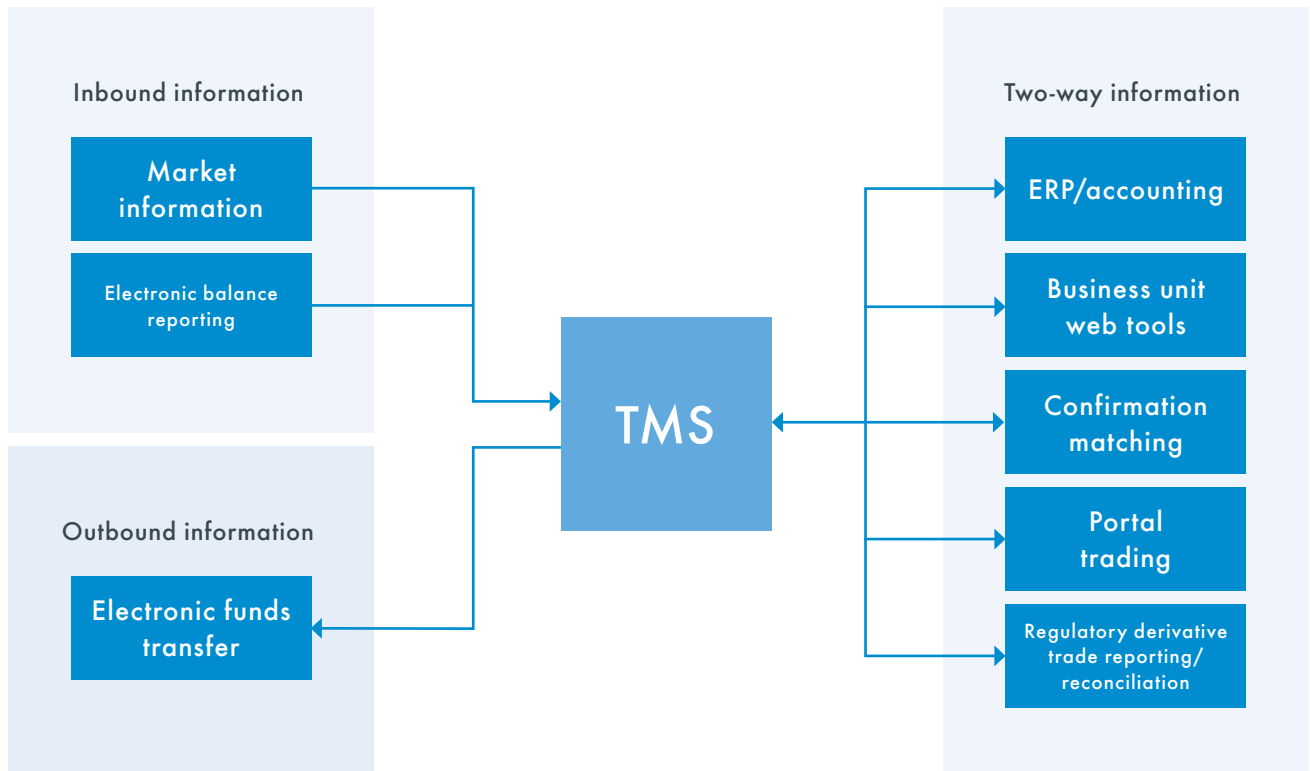
- Facilitates the processing and management of specialist information
- Provides secure information through workflow controls
- Defines user rights, ensuring the segregation of duties
- Provides an audit trail
- Produces treasury reports and accounts for treasury transactions, which under International Financial Reporting Standards (IFRS) and equivalent local standards may be complex.

These issues are important for a number of reasons:

- The amounts of money handled by treasuries are always large relative to the size of transactions typically handled elsewhere in an organization. This means the potential cost of even a relatively minor incident of error or fraud can be material, even fatal, for the business.
- Treasury needs reliable information to help make decisions on risk management, liquidity and funding, the financing of investment and acquisitions, structuring debt and more.
- Corporate governance is on the agenda of every CFO and treasurer, and may to some extent be externally imposed. For example, the US Sarbanes-Oxley legislation requires rigorous operational controls, which are only achievable with specialist technology.

The TMS will often need to be supplemented by or interfaced with additional systems covering payments, market information or other specialist tools. These are presented in the diagram on the following page.

Figure 7: Typical systems used in treasury



Many smaller organizations will not require a TMS, as their treasury operations are relatively simple and involve low volumes.

8. TREASURY AND FINANCING RISKS

Treasury and financing transactions are subject to a number of risks and consequences that are important for management and Boards to understand.

Many markets have become more difficult and expensive to operate in since the 2008 global financial crisis. Greater risk awareness within organizations means that businesses take long-term views in planning business development. Treasury must therefore ensure that management understands the risks or consequences of treasury transactions.

Getting ahead – The management accountant’s perspective

Banks and financial intermediaries profit from selling specialist derivative products to organizations that are seeking to mitigate a range of different financial risks. An awareness of treasury issues will help management accountants to buy appropriate products, reducing the risk of being mis-sold (or mis-purchasing) overly complicated or inappropriate derivatives for their organizations.

Management accountants who carry out treasury activities should seek some treasury training to gain an appreciation of the possible complexities, risks and issues associated with treasury activities. Such an appreciation should increase a management accountant’s awareness of when to secure specialist treasury advice.

Key treasury and financing risks include interest rate risks, foreign-exchange risks related to transactions, and risks associated with the translation of assets and liabilities denominated in foreign currency that are consolidated into group financial statements.

Interest rate risk

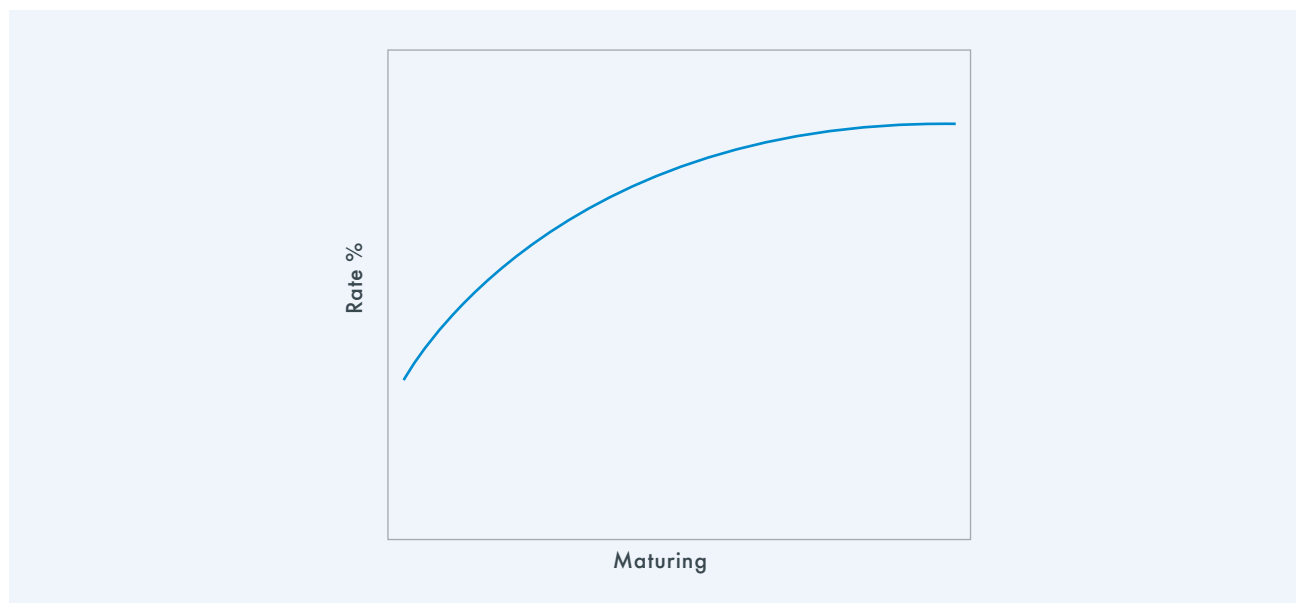
If interest rates rise, borrowers will pay more interest. If they fall, depositors will earn less. However, there are more facets than this to interest rate risk, as described below.

Table 4: The aspects of interest rate risk

Risk type	Description
Risk over future interest payments or receipts	Borrowers will pay more and investors will receive more if interest rates rise.
Economic risks – linkage between business performance and interest rates	If a business does well in a high interest rate environment, its risk to rising interest rates is lower. Such a rise may be beneficial for the business overall if its commercial improvement is greater than the effect on the organization’s costs of debt.
Organizations with high leverage face high exposure to interest rate risk	A high level of exposure must be managed to prevent it from swamping the organization.

Normally, market interest rates that are fixed for longer periods are higher than those fixed for shorter periods (the yield curve).

Figure 8: The yield curve



If an economy slows, the government or central bank may reduce the interest rate to stimulate activity. This means a business may be somewhat protected against economic downturn.

Organizations with a naturally high leverage structure, such as property companies and those financed by private equity, will usually have a high proportion of fixed-rate debt. Generally their revenue streams, such as rental income, are also reasonably fixed. This matching between debt and income reduces their exposure to interest rates.

Borrowers with steady amounts of debt will generally find it cheaper in the long run to adopt a fully floating interest rate approach.

This is mainly because longer-term (fixed) rates include inflation, a liquidity premium and, arguably, a maturity premium. Because many organizations can generally raise prices with moderate inflation, paying a premium by fixing seems wasted expense.

For some organizations, the objective may be to minimize the chance of a financial covenant being breached, making interest cost a secondary issue. This is achieved by managing the fixed/floating ratio of debt. Since bond finance is usually at fixed rates and bank finance is usually at floating rates, it is possible to enter into interest rate swaps to reach the chosen ratio.

Tool: Interest Rate Swaps



Economic foreign-exchange risk, or strategic foreign-exchange risk

Economic foreign-exchange risk is the risk of a change taking place in the value of an organization due to varying exchange rates. It is the aggregate of the present values of all types of foreign-exchange risks. The largest component is sometimes called ‘strategic foreign-exchange’ risk, which arises from any consequential changes in the organization’s competitive position. Factors affecting economic foreign-exchange risk include:

- The organization’s market position and its ability to control sales and cost prices
- Markets, such as aerospace, which are effectively denominated in a particular currency (in this case USD)
- Businesses concentrated in particular geographies, as opposed to truly global businesses. (The specifics of an individual organization mean that economic foreign-exchange risk usually differs materially between organizations.)

Economic risk goes to the heart of a business strategy and an organization’s underlying competitiveness. The response to economic risk is therefore based around the business strategy itself, and the risk can rarely if ever be avoided. The risk to the organization needs to be properly measured, considered and responded to with a view to containing or reducing that risk, using means such as facilitating contingency plans for business operations. In principle, the nature of the risk might properly be responded to with instruments designed for the purpose, such as financial options. However, given the very long terms and the large sums involved, costs are usually prohibitive.

Tool: Foreign-Exchange Options To Hedge Exchange Rate Risk

Currency/commodity transaction risk

Pre-transaction risk

Pre-transaction risk arises when an organization has to commit to a price before actually entering into transactions or commercial agreements. It can also occur where volumes to be shipped are uncertain, under call-off contracts or contracts with cancellation or partial cancellation clauses, for example, or when tendering for a construction contract.

This contingent risk is ultimately best managed with a contingent risk-transfer product, such as an option. Alternatively, companies may hedge proportions of the forecast cost or revenue using foreign exchange (FX) forwards (agreements conveying the right to buy or sell FX at a set price at a predetermined time). For example, when the German auto industry cancelled call-off orders early in the recent European financial crisis, it left central European suppliers with outstanding outright currency contracts that were cripplingly expensive to cancel. If options had been in place, they could have been exercised if in the money, or allowed to expire if out of the money. That is why companies commonly use a proportion of options, partially to hedge or transfer such risks.

Options have certain important characteristics:

- They provide the option buyer (the holder) with the right (but not the obligation) to exercise the option if the price of the underlying asset meets or exceeds a certain price – the ‘strike price’.
- Once purchased, they provide protection against adverse price movements while allowing the holder to benefit from favorable movements.
- Purchased options can never be a liability for the holder.
- There is an up-front cost to buying options (the premium) which can seem expensive.
- They can be seen as speculative if used for cash flows that are in fact certain.
- For most organizations, selling options is speculation, as they place a potentially unlimited liability on the seller.

Options can be combined, usually offsetting the cost of a purchased option with the proceeds from selling an option. This reduces the up-front cost in return for a reduced benefit. There is no standardized name convention for such combinations, so such instruments should only be entered into after a thorough evaluation of the possible outcomes for the corporate customer. The potentially unlimited pay out under the sold option may negate the effectiveness of such a hedge.

Foreign-exchange transaction risk

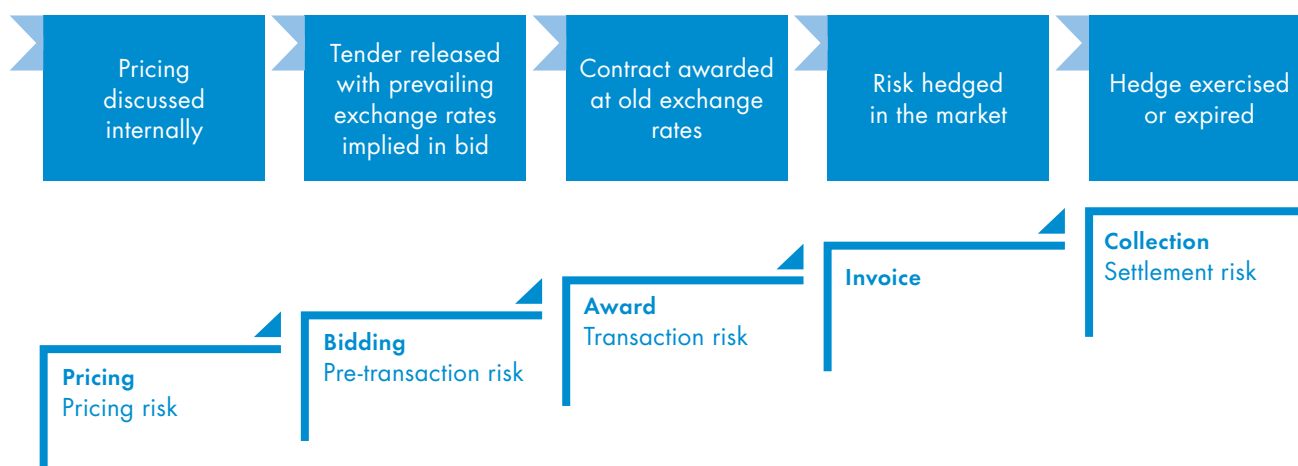
Transaction risk is the risk that changes in FX rates may make committed cash flows in a foreign currency worth less or cost more than expected. Examples of its causes can include sales or purchases made or contracts entered into in a foreign currency.

Like other risks, transaction risk can either be avoided altogether (by buying or selling goods and services only in local currency), or accepted, reduced or transferred. Some exposures can be reduced or avoided by netting against opposite exposures within the organization or another group subsidiary. Others can be transferred to a third party. The relevant external hedge is often a forward contract, usually used in foreign exchange. Another option is a future, usually used for commodity risk, which transfers the risk to the hedge counterparty.

External hedging with forward contracts and futures provides a degree of certainty for periods, depending on the organizational policy, that can extend to several years. While hedging can smooth out some of the market volatility in rates/prices, if there is a permanent and significant change to market rates it only buys time before the impact is felt. In the long run, the organization may still have to adjust its business model by changing its geographic sales patterns or the currency of its input costs. This might even mean relocating its manufacturing location.

Leaving a non-trivial FX exposure un-hedged can itself be seen as speculation. This applies to foreign exchange (FX), as much as commodity risk.

Figure 9: Foreign-exchange options to hedge exchange



Getting ahead – The management accountant’s perspective

Management accountants should ensure that any hedging product or forward contract considered is fully thought through, particularly in terms of the impact they could have on the organization’s reported profit and loss or balance sheet under relevant reporting regulations (e.g. IFRS [International Financial Reporting Standards] or GAAP [generally accepted accounting principles]). It may be beneficial to bring together treasury expertise and the organization’s auditor to consider the options and the range of possible impacts.

Foreign-exchange translation risk

Foreign-exchange translation risk results from exchange differences that arise when consolidating foreign currency assets and liabilities into the group financial statements. This is not a cash exposure but an accounting issue, and it is therefore often not hedged by the organization. This is the approach that shareholders generally expect when investing in an international group.

Accounting standards, however, tend to point managers towards ‘net investment hedges’. These are where an organization borrows or enters into a derivative to hedge against movements in the value of the accounting net assets of an overseas entity. However, this hedge of accounting net worth may bear little relation to the economic risks/value in such investments. In fact, the hedge may actually increase risk by introducing a cash flow from the hedge that is not balanced by an offsetting cash flow from the foreign investment.

Translation exposure can nevertheless affect credit ratios and cash flow measurements that may be relevant to debt covenants.

The measures and ratios that can be affected by movements in exchange rates include:

- Net worth or enterprise value
- Gearing
- Net debt/EBITDA
- Interest cover
- Cash flow (and measures involving cash flow).

The risk of covenant default is often the measure adopted in the management of foreign exchange translation risk. It can be assessed by modelling various ‘what if’ scenarios applied to the business plan.

The response to such a risk is usually to adjust the amount of debt by currency, so that the debt is more evenly balanced against earnings or net worth by currency.

Table 5: The impact of weakening local currency (CCY)

	Subsidiary (USD)	Holding co (CCY)	Consolidate CCY @ 1.5	Consolidate CCY @ 2.0	Change % (33.3%)
Total assets	100.00	90.00	240.00	290.00	20.8%
Borrowings	90.00	0.00	135.00	180.00	33.33%
Equity	10.00	90.00	105.00	110.00	4.8%
EBITDA	15.00	10.00	32.50	40.00	23.1%
Interest 5%	4.50	0.00	6.75	9.00	33.3%
Covenant measures	Net worth		105.00	110.00	4.8%
	Gearing		1.29	1.64	27.1%
	Net debt/EBITDA		4.15	4.5	8.4%
	Interest cover		4.81	4.44	(7.7%)

This example shows the impact of a weakening local currency ('CCY') on the ratios listed above for a local holding company which has a subsidiary in the United States. While debt has increased from CCY135 to CCY180, EBITDA and net worth have also both increased.

For simplicity, the example uses a single exchange rate to translate the balance sheet, income statement and equity in each scenario; the exact treatment will depend on the reporting jurisdiction. The point remains however, that changes to ratios are unlikely to be linear or necessarily intuitive.

9. FINANCIAL RISK MANAGEMENT AND RISK REPORTING

Corporate finance theory suggests that the value of an organization can be increased if its risk (the uncertainty of returns) is reduced.

Risk management approach

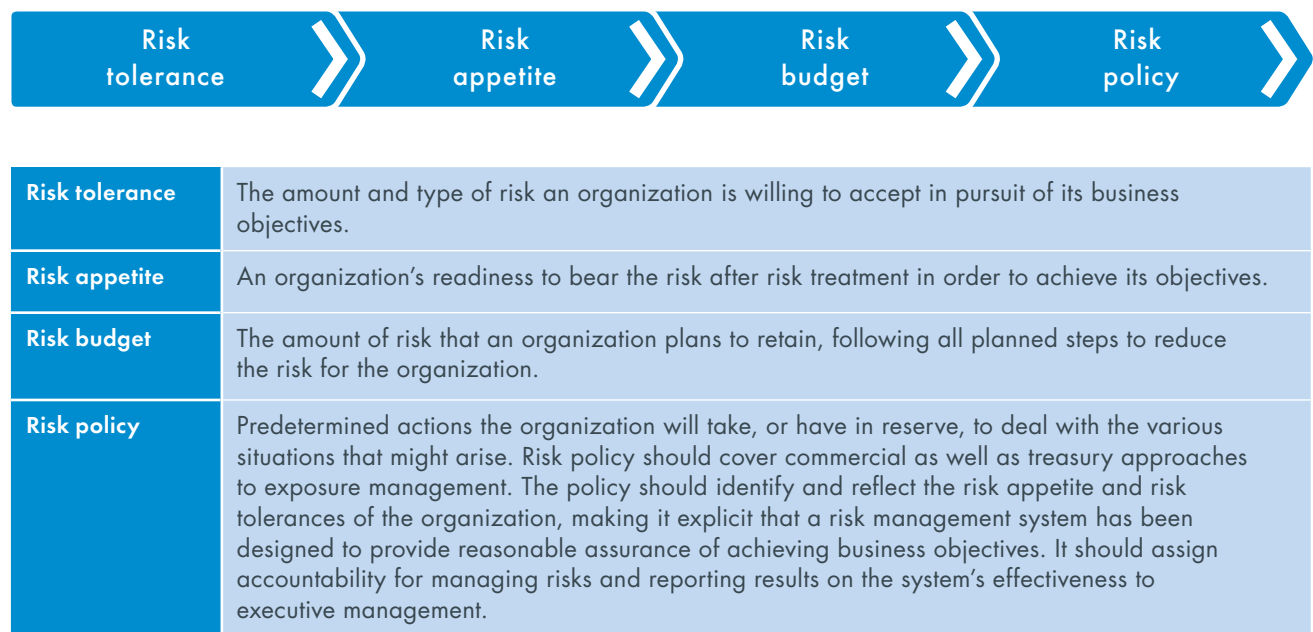
ISO standard 31000-2009 defines risk as the ‘effect of uncertainty on objectives’. Risk can present opportunities for or threats to objectives. An uncertainty that does not affect objectives cannot be a risk to those objectives.

Key questions to consider – Start the dialog

Management accountants must be aware of the overall approach of the organization to financial risk management, and be able to answer the following questions:

- Has the organization properly articulated its management approach to threats and opportunities?
- Hence, is there capacity to take certain risks?
- If so, is there an appetite?
- How much of this appetite can be delegated to the treasury function?

Figure 10: Approach to risk management



Risk management vs speculation

‘Speculation’ is the act of deliberately taking on risk or hedging a risk that you do not have. Opportunities consistent with the business strategy, commonly within strict limits (such as credit risk or liquidity risk in investing surplus funds) are acceptable. Anything else (inconsistent with the business strategy) is speculation. It should therefore be prohibited in corporate treasury as elsewhere.

Deliberate or inadvertent inaction is also considered speculation when policy would call for action. It too should be prohibited or strictly controlled within limits. For example, treasury operations might be entitled to disregard foreign-exchange positions passed to them if they are accepted as small and not of market size.

This approach does not prohibit the taking of financial risk. For example, increasing levels of debt (leverage) that make the financial structure riskier is a widely accepted approach to increasing shareholder returns. But such leverage should be decreased if either the business or its financing becomes more risky. (We have seen this happen widely since the global financial crisis.)

Risk management framework

Once a budgetary approach to treasury has been established, a risk management framework provides a mechanism to develop an overall approach to financial risks across the entire organization. It does so by creating the means to discuss, compare, evaluate and respond to these risks. It can be seen as a series of successive phases.

Figure 11: Risk management framework

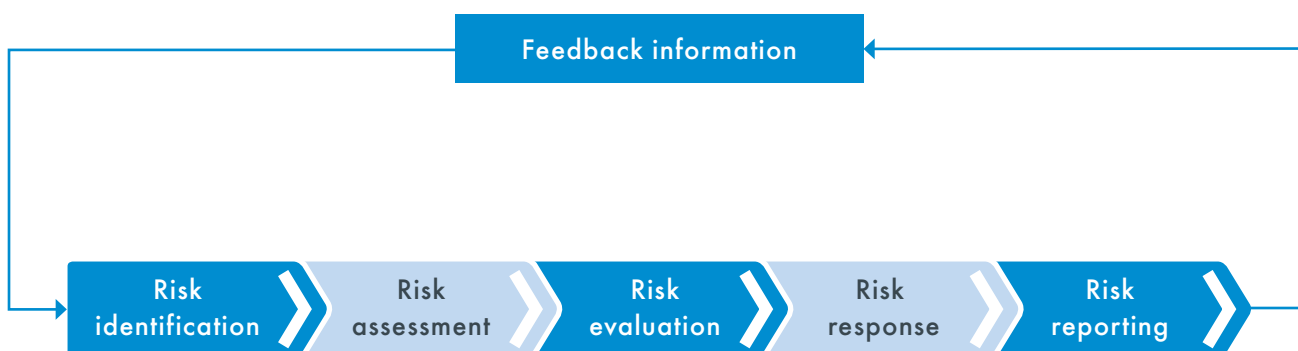
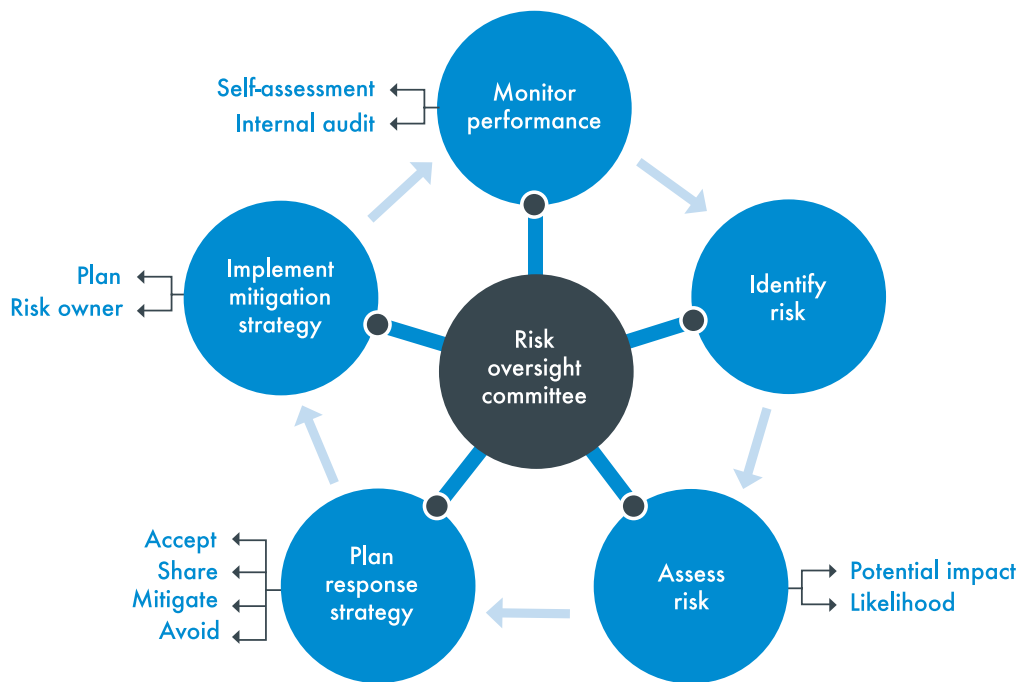


Figure 12: Enterprise Risk Management (ERM) Process



Phase	Description of process
Identify risk	Identification and classification of the financial risk exposures threatening an organization’s objectives, including where they come from.
Assess risk	An assessment of the likelihood of each financial risk occurring and of its potential impact on business objectives. It also includes the prioritization of those significant risks for further analysis, evaluation and management. Using a risk map or probability/ impact matrix is a useful way of assessing risks systematically. The assessment aims to establish the probability and extent of potential loss (or gain), both for single risks and groups of risks combined, and to involve consideration of non-calculable risks (events). Evaluation techniques include scenario analysis, sensitivity analysis, Value at Risk, statistics, and maximum loss. For some risks, such as political risk, there can be no statistical approach. In these cases, non-statistical evaluation such as scenario analysis or stress testing is key.
Plan response strategy	After assessing the risks, organizations should plan their risk responses. Each organization’s corporate objectives, risk appetite and risk sources are unique, leading to a different risk set and risk responses. Risk responses can be categorized into four classes: <ul style="list-style-type: none"> • Avoid or transfer the risk if investors do not expect the organization to take it. • Accept (retain) and monitor the risk if the threat is immaterial or the opportunity attractive. • Reduce threats (their probability or impact) by internal action such as internal controls, diversification or contingency plans. • Transfer risks to a third party via insurance, derivatives or the use of subcontractors. Organizations use risk policy statements to document risk responses (see Treasury policy).
Implement mitigation strategy	A key element of ensuring that a plan is transformed into a live risk management system is making individuals responsible for every risk.
Risk reporting	Reporting helps ensure that risks are being managed as agreed and that information is fed back in to the risk management process. (See Risk reporting).

Tool: Enterprise Risk Management ➤

Risk heat maps

A risk heat map is a tool used to present the results of a risk assessment process visually and in a meaningful and concise way.

The heat map diagram below provides an illustration of how organizations can map probability ranges to common qualitative characterizations of risk event likelihood and a ranking scheme for potential impacts. They can also rank impacts on the basis of what is material in financial terms, or in relation to the achievement of strategic objectives.

Organizations generally map risks on a heat map using a ‘residual risk’ basis that considers the extent to which risks are mitigated or reduced by internal controls or other risk response strategies.

Figure 13: Risk heat map

Extreme	5	10	15	20	25
High	4	8	12	16	20
Medium	3	6	9	12	15
Low	2	4	6	8	10
Negligible	1	2	3	4	5
	Remote	Unlikely	Possible	Likely	Probable
% ranges	0 - 10%	>10-25%	>25-50%	>50-90%	>90-100%

Tool: Risk Heat Map

Risk reporting

Responsibility for the management of financial risk is often delegated to those responsible for treasury activities. These treasury activities must be included in the organization’s management information as well as, where material, to the market.

For each financial risk, there should be some measure of the risk and risk reduction. Regular reports should:

- Inform management of financial exposures outstanding both before and after any hedging
- Demonstrate that treasury activity is within the policy authorized by the Board
- Promote the concept of analysis and performance-measurement in treasury
- Create a feedback mechanism that leads to improvements in efficiency and control.

Best-practice reporting should focus on accuracy, completeness, timeliness and materiality.

Table 6: Financial risk reporting

Policy/risk area	Typical risk management report(s)	Frequency and/or period of report
Liquidity management	Identification and classification of the financial risk exposures threatening an organization's objectives, including where they come from.	Weekly out to 30 days and monthly out to one year (not just to the current year end).
Bank-relationship management	Facilities provided by bank with usage history and any issues, including concentration risk and attitude to renewals.	Quarterly, with a longer-term annual review.
Credit risk	Credit exposure against limits, significant issues or downgrades etc.	Monthly, with a longer-term annual review and special report following any major event that affects a banking relationship.
FX (and commodity) risk	Reports addressing transaction, translation and economic exposure.	Monthly, with an annual review focusing on longer-term economic exposure.
Funding and debt-portfolio management	Funding review and outlook, debt-maturity profiles and possible proposals for refinancing/new funding/equity raising.	Monthly, but more frequently in run up to the issue of new debt/equity, and with a major annual review.
Covenant compliance	Performance against covenants (if any) on historical and forecast basis.	Monthly, but weekly or daily or more often at times of stress.
Interest rate risk	Interest rate risk report.	Monthly, with an annual review.
Investments	Reports on security, liquidity and return.	Monthly, with an annual review.
Treasury operations	Reports to the treasurer on controls.	Daily.

Dashboard reporting is another tool for reporting the organization's financial risks. This is a report which summarizes in one page the organization's key risks/positions, with a brief commentary on any deviations. This is a particularly valuable tool for reporting to senior management. In the treasury domain, items on the dashboard may include:

- Foreign exchange (FX) exposures (pre- and post-hedging)
- FX volatilities
- FX rates
- Interest rates
- Borrowing facility headroom
- Cash positions
- Credit-default swap prices
- Funding developments.

10. GOVERNANCE

Effective oversight of treasury activities involves a clear definition of the organization's strategic and financial objectives and its risk management guidelines. Formal documentation and regular reviews of policies, procedures and performance ensure compliance with Board intentions.

Treasury objectives

- Has the Board's financial risk appetite been quantified and clearly communicated to treasury?
- Do the CFO, Audit Committee and Board of Directors understand the treasury function's strategies?

It is not always easy to quantify the Board's risk appetite. The potential impact on the financial statements, such as the Board's maximum acceptable fluctuation in earnings, is one possible measure. To assist the Board in understanding its risk appetite, management accountants should model the impact of various scenarios (such as interest rate and foreign exchange rate movements) on earnings, cash flows and key balance-sheet ratios. They should also engage with treasury to consider options for mitigating the risks to key financial targets posed by factors like exchange and interest rate variability and to model the impact of mitigating options or derivative products.

Products like derivatives might have impacts on the presentation of the organization's profit and loss and balance sheet under accounting and reporting regulations like IFRS and GAAP. They might even affect the company's valuation. Gaining clarity on such matters prior to discussing them with boards and audit committees could improve the quality of discussion and avoid surprises down the line.

Treasury policy

Key questions to consider – Start the dialog

Management accountants should be able to answer the following questions affirmatively:

- Is treasury policy aligned with financial strategy and the approach to risk?
- Is treasury policy approved by the Board and reviewed at least annually?
- Does the treasury policy set limits for each financial risk?
- Is adherence to treasury policies reviewed by the Board and independently audited?

All well-managed treasury activities are backed by written treasury policies that have processes in place for managing regular updates. Treasury policy is a mechanism by which the Board and management can delegate financial decisions about the business in a controlled manner. It should give those responsible for treasury activities written guidelines on their areas of responsibility, how they should go about these responsibilities, what their boundaries are and how their performance will be measured. These guidelines can be developed in formal procedures.

The treasury policy document should explain:

- The organization's financial risk management objectives, which should reflect its goals, risk appetite and sources of risk for the specific business and the economic environment in which it operates
- The risk management framework to be adopted by the organization (identify, assess, evaluate, respond, report)

- For each financial risk, what is the risk and why is it being managed, all in the context of the organization's risk appetite
- Risk measures to set target outcomes and to model the likelihood of their occurring. This may include sensitivity analysis with indicative probabilities attached
- Procedures for the day-to-day management of financial risks, including:
 - The delegation of responsibility for managing them
 - How treasury will relate to business operations where financial risks are identified and/or being managed
 - Financial risk targets and limits based on an acceptable level of risk, adapted as the organization evolves
 - Performance-reporting/feedback mechanisms.

Boards have ultimate responsibility for risk management and for approving risk policies. In larger organizations, risk management tasks may be delegated – but not abandoned – to a subcommittee of the Board, often called the Risk Management Committee (RMC). Those responsible for the treasury function should recommend financial risk management (and potentially other) policies to the RMC and ensure that the approved policies are followed.

Tool: Treasury Policy



11. TREASURY ACCOUNTING

An important feature of accounting standards is how quickly they change. They change faster in the treasury arena than in almost any other area.

International Financial Reporting Standards (IFRS)

IFRSs are being increasingly adopted as the global standards. There are five major international standards which particularly affect treasury:

- IAS 39 covers accounting for derivatives and for hedging decisions, to be superseded by IFRS 9 from 1 January 2018.
- IFRS 7 covers financial-instrument presentation and disclosure.
- IAS 17 covers leases, to be superseded by IFRS 16 from 1 January 2019.
- IAS 21 sets out how reporting entities should include foreign-currency transactions and foreign operations in their financial statements.

IAS 39 and its successor IFRS 9 are considered to be the most demanding of standards, as they cover the rules for hedge accounting for derivatives. In broad terms, all derivatives must be recognized on the balance sheet and carried at fair value; this can create significant income-statement volatility. If the transaction qualifies for hedge accounting and the company chooses to hedge account, some or all of this volatility can be removed or deferred. The ability to use hedge accounting is subject to very demanding criteria, and the introduction of a new general hedge-accounting model in IFRS 9 is generally perceived as a positive change. Compared to IAS 39, IFRS 9 allows more hedging instruments and hedged items to qualify for hedge accounting. Overall, it is trying to align hedge accounting more closely with the organization's risk management strategies (i.e. the underlying economic rationale for hedging).

Leases provide a source of financing for lessees. However, under current accounting (IAS 17), most leases are not reported on a lessee's balance sheet. Instead, they are only disclosed in the notes to the financial statements. The International Accounting Standards Board (IASB) has been consulting on changes to lease accounting since 2009. It has decided that a lessee would be required to recognize assets and liabilities arising from all leases, apart from leases of 12 months or less.

IAS 21 has two major objectives: to prescribe how to include foreign-currency transactions and foreign operations in an entity's financial statements; and to determine how to translate financial statements into a presentation currency. The principal issues are which exchange rate(s) to use and how to report the effects of changes in exchange rates in the financial statements. Because IAS 39 applies to hedge accounting, IAS 21 does not apply to hedge accounting for foreign currency items, including the hedging of a net investment in a foreign operation.

US GAAP

In the US, the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) is the source of authoritative and generally accepted accounting principles (GAAP) recognized by the FASB. The ASC topics that are most specific to treasury are:

- ASC Topic 815 -Derivatives and Hedging
- ASC Topic 830 - Foreign Currency Matters
- ASC Topic 840 – Leases.

ASC Topic 815 – Derivatives and Hedging – sets out the definition of a derivative instrument and specifies how to account for such instruments, including derivatives embedded in hybrid instruments. There are numerous differences in definitions and criteria in this area, and US GAAP contains more interpretive and implementation guidance than IFRS.

In September, 2016, the FASB issued proposed Accounting Standards Update ASU 216-310 that would make targeted improvements to the accounting guidance for hedging activities and disclosures, including those involving non-financial risk and interest rate risk.

ASC Topic 830 – Foreign Currency Matters – establishes standards for accounting for foreign-currency transactions. It also provides guidance for translating foreign-currency statements incorporated into an entity’s financial statements.

While there are some minor technical differences between ASC 830 and IAS 21, both require the translation into the ‘functional currency’ of a unit before translation into the reporting currency.

ASC 840 – Leases – describes and explains the accounting policies and disclosures applicable to leases.

In February 2016, the FASB issued a new leasing Accounting Standards Update (ASU) that will require a lessee to recognize assets and liabilities for finance and operating leases with lease terms of more than 12 months. The new ASU will be effective for public companies (beginning in 2019) and private companies (beginning in 2020).

Changing standards can have a major effect on covenants in loan agreements. A change might alter how some ratios are calculated, and these changes might possibly cause a loan default. For this reason, those standards in place at the date of the loan agreement are used to calculate covenants (in a process known as ‘frozen GAAP’). Multiple sets of accounts may be required as a result, one to meet IFRS and the other(s) to comply with various loan agreements.

12. CONCLUSION

The global financial crisis continues to have an impact on business everywhere, increasing the need for effective treasury practice. Financial markets are now more volatile as risks, such as financial counterparty risk, have increased and traditional funding sources are changing.

The banking landscape is changing dramatically; individual banks' capabilities are shrinking, and banks' balance sheets and corporate credit have become finite, valuable resources which have to be used as cost-effectively as possible. Increasing regulation will continue to add to the cost both of funding and hedging.

These changes are driving increased complexity, leading to greater liquidity risks for businesses that demand ever-more sophisticated management of their treasury functions. This publication highlights the role of treasury in organizations today and how having skilled treasury professionals can significantly add value.

Not all Boards and senior management fully understand what a treasury function should be doing. Management accountants, more so now than ever before, must proactively understand treasury requirements and when needed engage the treasury function. They exhibit advanced analytical abilities and are ideally positioned to identify and exploit technology and market trends to define future best practice to meet business needs.

13. FURTHER RESOURCES

[ACT Treasury Competency Framework](#)

[Cash Flow Modelling](#)

[CGMA Competency Framework](#)

[Cost Transformation Model](#)

[Enterprise Risk Management](#)

[Essential Tools for Management Accountants](#)

[Financial risk management: Market risk tools and techniques](#)

[Global Management Accounting Principles](#)

[How to evaluate capital expenditures and other long-term investments](#)

[Risk Heat Maps](#)

[Risk Management Toolkit](#)

[Scenario planning: Providing insight for impact](#)

INTRODUCING THE GLOBAL MANAGEMENT ACCOUNTING PRINCIPLES

Quality decision making has never been more important – or more difficult. Competition is relentless as new innovations daily disrupt the status quo. Torrents of information increase complexity and impulse takes over insight as organizations struggle to keep pace.

The Global Management Accounting Principles were created for this era of business. Management accounting is at the heart of quality decision making, because it brings to the fore the most relevant information and analysis to generate and preserve value. The Principles guide best practice in management accounting to ensure difficult decisions can be taken which will drive sustainable value.

The Principles were developed in conjunction with CEOs, CFOs, academics, regulators, government bodies and other professionals from 20 countries across five continents. They were prepared by the Chartered Institute of Management Accountants (CIMA) and American Institute of CPAs (AICPA) – which together represent more than 600,000 members and students in 177 countries.

The Principles are intended to be universally applicable to help organizations large and small, public and private, extract value from the increasing volume of available information. They are aimed at chief executives, chief finance officers and members of boards of directors who have oversight of their organizations' performance. Investors and other stakeholders will also find them useful. They can be used to support the development, execution and refinement of strategy through the performance management system, as well as to support the core activities of the management accounting function. The full document provides guidance on the application of each Principle to 14 different practice areas, ranging from financial strategy to risk management.

Definition: Management accounting is the sourcing, analysis, communication and use of decision-relevant financial and non-financial information to generate and preserve value for organizations.



A survey commissioned by CIMA and the AICPA of 1,100 senior executives from 35 countries found that 89% believe a stronger partnership with finance in the decision process will help them better manage their organizations over the coming years.

THE FOUR PRINCIPLES AND OUTCOMES:

There are four principles that collectively help to drive value across your organization.

Principle: Communication provides insight that is influential

Outcome: Influence

Management accounting begins and ends with conversations. The Principles have been designed to help organizations cut through silos and encourage integrated thinking, leading to better decision making.

Principle: Information is relevant

Outcome: Relevance

Management accounting makes relevant information available to decision makers when they need it. The Principles provide guidance on identifying past, present and future information, including financial and non-financial data from internal and external sources. This includes social, environmental and economic data.

Principle: Impact on value is analyzed

Outcome: Value

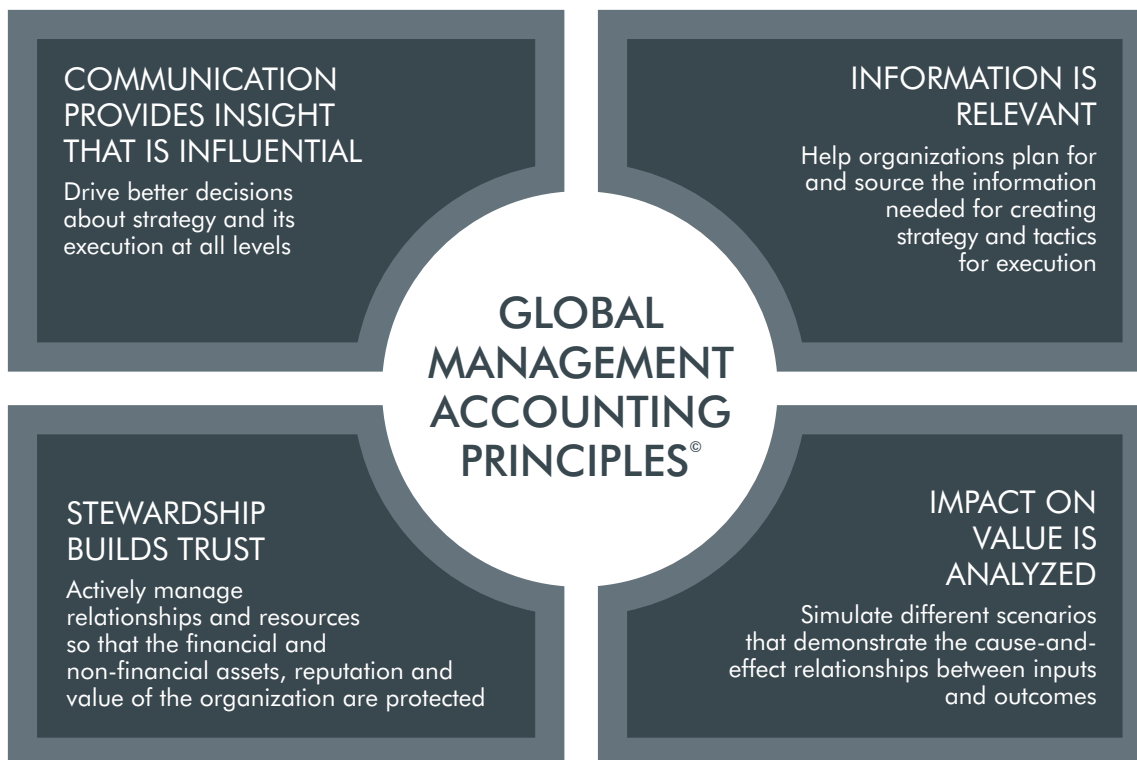
Management accounting connects the organization's strategy to its business model. This Principle helps organizations to simulate different scenarios to understand their impact on generating and preserving value.

Principle: Stewardship builds trust

Outcome: Trust

Accountability and scrutiny make the decision making process more objective. Balancing short-term commercial interests against long run value for stakeholders enhances credibility and trust.

The Global Management Accounting Principles



Visit cgma.org/principles for more information.

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