.Dott
Risk
Managing Your Risk Guide

Balance Sheet and Liquidity Risk

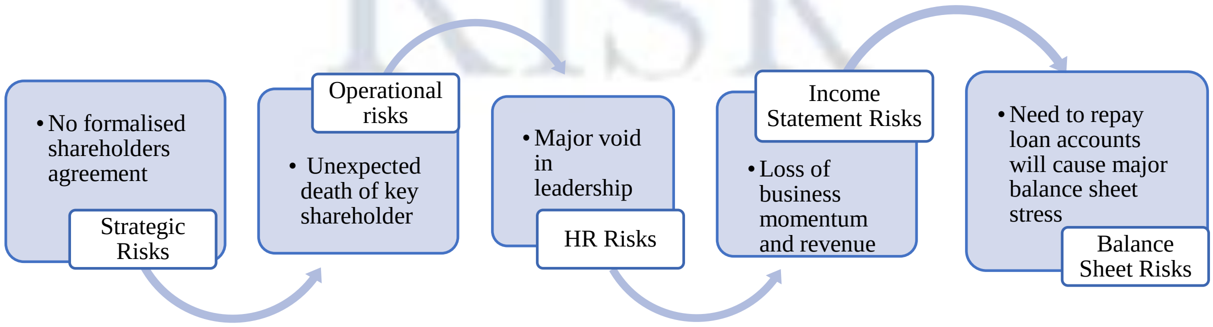
What is it?

Balance Sheet and Liquidity Risks are risks arising from specific weaknesses in asset and liability management as well as in financial disciplines and financial controls which impact on the balance sheet.

Where does this risk area emanate from?

This risk can manifest in adverse socio-economic conditions, crime event, regulatory issue, poor management of assets and operational management.

Example of Balance Sheet risk interconnectedness to other risk areas:



Where does this risk area manifest itself?

This risk manifests in operational and financial risks which result in liquidity and solvency problems, impacting on the strength of the organisations balance sheet and ultimately in organisation failure.

Why is it important to manage these risks?

Sound financial control and discipline is essential for a healthy balance sheet. The balance sheet and accompanying financial statements of a business need to be up to date and audited by reputable auditors. A business needs to be a going concern and its financial statements should accurately reflect the state of the business and should not be qualified in any way. This is particularly important if the business is going to require the support and commitment of external parties, lenders and other stakeholders.

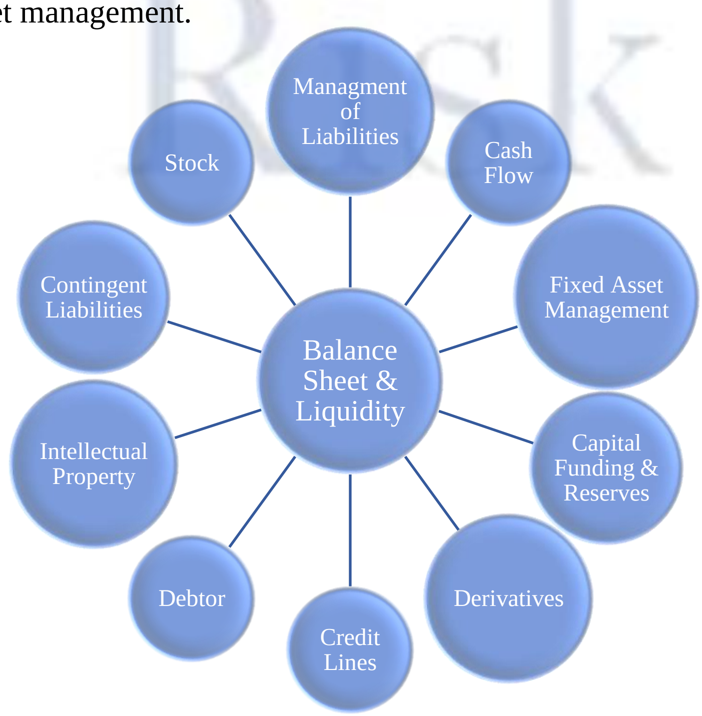
Where to start in managing this risk area?

All organisations or businesses require funding to finance their operations and the capital base is at the heart of the balance sheet. The better a balance sheet is capitalised by its shareholders, the stronger it is and the greater the level of external support it will enjoy from banks, other lenders and credit providers. The extent of on-going funding required is dependent on the scale and nature of the business.

What is the benefit of actively managing this risk area?

A robust and stable balance sheet is essential for the effective running and sustainability of a business. Solvency and liquidity are integral if a business is to get the support of extenders of credit and finance and be a saleable asset of value.

DottRisk has the following detailed risk guides covering what we believe are the critical areas of balance sheet management.



Introduction to Balance Sheet and Liquidity Risk

The balance sheet is a snapshot of the financial position of an organisation at any point in time. It is a function of all the financial transactions that take place in the business and reflects the “health” of the business. It is important that a business protects the integrity of its balance sheet by understanding the impact of its decisions and operations on its balance sheet.

Sound financial control and discipline is essential for a healthy balance sheet. The balance sheet and accompanying financial statements of a business need to be up to date and audited by reputable auditors. A business needs to be a going concern and its financial statements should not be qualified in any way. This is particularly important if the business is going to require the support and commitment of external parties, lenders and other stakeholders.

All organisations require funding to finance their operations and the capital base is at the heart of the balance sheet. The extent of funding required is dependent on the scale and nature of the business. Funding is invariably provided by the shareholders and third parties who extend credit to the business. Asset and capital expenditure intense businesses will require greater funding than those rendering a basic service. Cash based businesses require less capital than businesses extending credit. As such there needs to be an alignment between the business model with the required level of funding, being an appropriate mix and balance between equity, debt, finance and trade credit.

Given the dynamics of business, the availability of shareholder funding and shareholder support is integral to the sustainability of a business. Management’s relationship with shareholders and the alignment of strategic thinking is therefore essential. Any expansion or diversification of the business will require funding in some form.

Before a business takes on any debt, it needs to be able to support the level of debt from its cash flow both in terms of servicing interest where applicable, and in being able to repay the capital when due. At the same time, the shareholders and management always need to ensure that the business is both solvent i.e. that its assets exceed its liabilities at all times and that it is liquid i.e. that it is able to meet its immediate obligations from cash resources. Loans and credit facilities are often extended subject to the borrower meeting and maintaining specified covenants and conditions. These are normally linked to the state of the balance sheet such as total debt to equity/shareholder’s funds, current assets to current liabilities, levels of profitability and ability to cover interest from earnings. The assets of the business must at all times be conservatively reflected at their realisable or market values. Assets, both tangible and intangible such as goodwill, which are not conservatively valued will merely result in an over-statement of the financial position of a business and will inevitably reflect themselves in a loss at some stage.

Management of Liabilities

Before any liabilities are incurred, whether as a result of loans, finance, trade credit or expenditure, a business needs to be certain that it can repay these when they fall due. The same applies to any contingent liabilities it may incur e.g. guarantees issued, lease obligations, contractual undertakings.

The extent to which a business can grow its liabilities are largely dictated and limited by the level of shareholder funds i.e. capital, reserves and/or shareholders loans relative to outside liabilities.

Structuring credit facilities and liability repayments in line with cash flow is one of the crucial steps in liability management. Cash flow needs to be managed to ensure cash is available to repay liabilities and the capital and interest on debt when it falls due for payment.

Cash Flow and Cash Generation

The cash flow cycle of a business is dictated by its level of turnover, stock levels held, overhead and expense obligations, capital expenditure, loan/debt repayments, tax obligations, the repayment of creditors and collections from debtors where credit is extended. In simple terms, for a balance sheet to strengthen more cash must flow into a business than leaves it. The overall profit margin on the sale of goods or services will primarily dictate the net cash available in the business. Liquidity and liquidity management is everything in managing the day to day affairs of a business.

The preservation and maintenance of cash resources is a key component of cash flow management and business planning. Growth invariably has to be funded by cash from reserves or borrowings. Maintaining reserves and cash for emergencies or disasters is also a critical part of balance sheet management.

Expansion of infrastructure, the funding of a debtor's book and the building up of stock levels requires capital, cash or use of credit facilities or loan funding. The acquisition of other businesses, the expansion of the business or the investment in new product lines etc. will in the normal course need to be funded by cash reserves built up or supported by strong positive cash flows from the operations.

Managing liquidity is a critical part of cash flow management. Matching of cash flow movements from trading operations, or from the use of credit or loan facilities or from asset maturities such as fixed or notice deposit investments or asset disposals, must be managed in line with meeting liabilities as and when they fall due. This is particularly important to enable debt or loan repayments to be met and for the meeting of core operating expenses, salaries, bonuses, dividends and tax payments.

Fixed Asset Management

The fixed assets represent a significant part of a businesses' capital. As such, it is vital to optimise fixed assets in the generation of income and cash flow. Unproductive and non-income generating assets should be sold, disposed of or be replaced/upgraded.

To ensure the on-going good condition, productivity and the longevity of its fixed assets, a business must maintain and service these i.e. buildings, machines, plant, equipment and vehicles.

Physical control and security of assets is essential and vital and valuable movable assets should be tracked and insured. Insurance should cover liability, loss, theft or accidental damage and be appropriate and sufficient to cover replacement.

Ensuring Adequate Capital Funding and Maintaining Reserves

To ensure adequate funding, a business must raise sufficient equity from shareholders in the form of equity and/or loans to meet strategic and on-going business requirements.

Capital is a scarce commodity and needs to be effectively deployed. The use of capital needs to be focused on those areas and business activities that are going to enable and provide the maximisation of the return on the capital invested at an acceptable level of risk. Lenders do not in the normal course wish to advance more monies than the shareholders themselves have invested in their organisation.

Long term funding should be matched with the funding of fixed assets and infrastructure. These should be in line with the future cash flow generation of the organisation as debt servicing and repayments will need to be made as per the loan or debt conditions agreed.

It is also important to put in place overdraft and/or credit and/or financing facilities to fund the working capital and operational requirements of the business.

Ideally a mix of short, medium term and long-term funding should be availed of by an organisation.

Every organisation will at some time be faced with adverse trading conditions, unexpected events or surprises, the urgent need to replace a major asset and disasters. Most of these will have financial implications which will have a material impact on the cash resources of the business. In order to meet these unexpected events an organisation needs to build up cash reserves or formalise credit facilities which can be availed off to address these situations when they occur.

Currency, Interest Rates and Derivatives

The extent of the potential impact of currency, interest rate and commodity price movements will vary for each organisation.

The level of debt, foreign currency exposure, the degree of imported or exported products or services or foreign currency denominated expenses or revenues and the reliance on commodities, will have a major bearing on these risks.

Rising interest rates, a weakening or strengthening currency and commodity price movements might not only impact profitability but can also have a material impact on cash flow.

In order to counter the potential adverse impacts of currency, interest rate and commodity price risks, it is important to hedge these within manageable risk levels. Depreciation of a currency is not always gradual and there may be periods of rapid depreciation and high volatility.

Optimising Credit Lines and Supplier Finance

For an organisation to grow, it is going to need to trade at higher levels of turnover and/or profitability. Growth needs to be funded and credit is a key element of funding growth. It is important to establish and develop credit relationships with core suppliers, banks, commercial finance companies and for the provision of the most appropriate credit funding lines for: Assets, Term loans, Stand-by facilities and Working capital.

The cheapest form of finance is credit terms from suppliers. It is recommended that you set up or negotiate extended payment terms with your key suppliers and other general creditors. This can be a critical dimension in the funding of your working capital and your cash flow cycle. You must still take into account the existing overall level of your liabilities and the level of debt before increasing these.

Often lenders to an organisation impose covenants around their loans or debt. This is to try and ensure that the organisation is capable of meeting debt repayments, is able to comfortably service interest on its debt and to stop an organisation indiscriminately increasing the level of its debt. If your balance sheet and financial performance deteriorates you run the risk of defaulting on or triggering covenants and then having loans recalled or terminated.

Debtor Management

To ensure that your debtor's book forms a key element of your balance sheet, it is essential that your debtors remain current and collectible. To achieve good debtor management, you need to implement a robust credit vetting system before extending credit to debtors, by using a rigorous application and evaluation process, and by having key support systems in place.

On-going and regular review of your existing debtors is also a critical part of debtor management. It needs to be remembered that a bad debt is not just the loss of profit margin but is effectively a loss of capital and cash.

Intellectual Property (IP)

Where intellectual property is reflected as an asset in the balance sheet, this value has to translate into revenue earned directly as a result of that IP and its use. While it costs money to register IP such as trademarks, patents and designs, the financial impact from not protecting these can be significantly higher.

Where IP is no longer of any value, is obsolete or of no importance and does not contribute directly to revenue/income generation it should be written down to zero and no longer be recorded in the balance sheet.

Depending on the value accorded to IP, the write down while not affecting cash flow can significantly reduce reserves and the capital of a business and hence its solvency.

As part of IP protection, it is important to include confidentiality clauses, restraints of trade and non-compete clauses in the contracts of employment of employees.

Managing Contingent Liabilities

A contingent liability is a possible liability that may occur, depending on the outcome of an uncertain future event. These may be claims against the business, unresolved lawsuits, product warranties, tax claims, sureties, forward exchange contracts, guarantees issued on behalf of the organisation etc.

Once a contingent liability becomes a real liability, it becomes payable at some point in time. This could have an immediate significant impact on not just profitability, but on the balance sheet, solvency and cash resources of the business. The inability to pay could result in the organisation failing.

Contingent liabilities can have a material impact on the valuation of a business and the ability to sell or dispose of a business. The greater the extent of contingent liabilities, the harder it is to sell or dispose of a business.

Stock Management

Stock holdings tie up a lot of capital and cash, so it is critical that stock levels are optimised. Stock turn is a key part of managing working capital and in turn cash flow.

Ideally you want to hold only readily saleable stock, stock that is in demand and stock on which you can earn a meaningful profit when sold. Stock holdings need to be driven and guided by sale forecasts. Sales forecasts need to be as accurate as possible and take cognisance of multiple factors e.g. historic sales, availability of stock, supply constraints, lead times, state of the economy, competition, product substitutes, weather, changes in fashion/taste, technological changes etc.

Order lead times around fast-moving stock and related components become very important as do the supply chain considerations around each item.

Physical control of stock from receipt to point of sale is essential as stock shrinkage or loss is effectively a loss of capital and cash.

Key Balance Sheet and Related ratios

Ratios should be used to measure how a business is generally performing. Ratios in isolation don't mean much, but by comparing key ratios over a period, it is also possible to establish trends and then enable a specific focus on those areas and aspects that are deteriorating.

Return on assets = Net income divided by average total assets. ROA is used in evaluating management's efficiency in using assets to generate income.

Debt ratio = Total Liabilities divided by Total Assets. Measures the portion of business assets that are financed by debt (obligations to third parties).

Total Asset Turnover = Net Sales divided by Average Total Assets. Measures overall efficiency of a business in generating sales using its assets.

Debt-Equity Ratio = Total Liabilities divided by Total Equity. Evaluates the capital structure of a business. A D/E ratio of more than 1 implies that the business is a leveraged business, less than 1 implies that it is a conservative one.

In a general sense, this ratio is simply debt divided by equity. However, what is classified as debt can differ depending on the interpretation used. The ratio can take on a number of forms including: Debt / Equity, Long-term Debt / Equity, Total Liabilities / Equity. In a basic sense, Total Debt / Equity is a measure of all of a company's future obligations on the balance sheet relative to equity. The ratio is also known as risk, gearing or leverage.

Current Ratio = Current assets divided by Current liabilities. Evaluates the ability of a business to pay short-term obligations using current assets

Quick Ratio = current assets less stock divided by current liabilities. Also known as "*quick ratio*", it measures the ability of a business to pay short-term obligations using the more liquid types of current assets

Net Working Capital = Current Assets - Current Liabilities. Determines if a business can meet its current obligations with its current assets; and how much excess or deficiency there is.

Receivable Turnover = Net Credit Sales divided by Average Accounts Receivable. Measures the efficiency of extending credit and collecting the same. It indicates the average number of times in a year a business collects its open accounts. A high ratio implies efficient credit and collection process.

Debtors days = 360/365 Days divided by Receivable Turnover. Also known as *"receivable turnover in days"*, *"collection period"*. It measures the average number of days it takes a business to collect a receivable. The shorter the DSO, the better.

Inventory/Stock Turnover = Cost of Sales divided by Average Inventory. A high ratio indicates that the business is efficient in managing its inventories. Represents the number of times inventory is sold and replaced. Take note that some authors use Sales in lieu of Cost of Sales in the above formula. A high ratio indicates that the business is efficient in managing its inventories.

Days Inventory Outstanding = 360 Days ÷ Inventory Turnover. Also known as *"inventory turnover in days"*. It represents the number of days inventory sits in the warehouse. In other words, it measures the number of days from purchase of inventory to the sale of the same. Like DSO, the shorter the DIO the better.

Accounts Payable Turnover = Net Credit Purchases divided by Ave. Accounts Payable. Represents the number of times a business pays its accounts payable during a period. A low ratio is favoured because it is better to delay payments as much as possible so that the money can be used for more productive purposes.

Days Payable Outstanding = 360 Days ÷ Accounts Payable Turnover
Also known as *"accounts payable turnover in days"*, *"payment period"*. It measures the average number of days spent before paying obligations to suppliers. Unlike DSO and DIO, the longer the DPO the better.

Times Interest Earned = EBIT divided by total Interest Expense. Measures the number of times interest expense is converted to income, and if the business can pay its interest expense using the profits generated. EBIT is earnings before interest and taxes.

Return on Sales = Net Income divided by Net Sales. The higher the ROS the better.