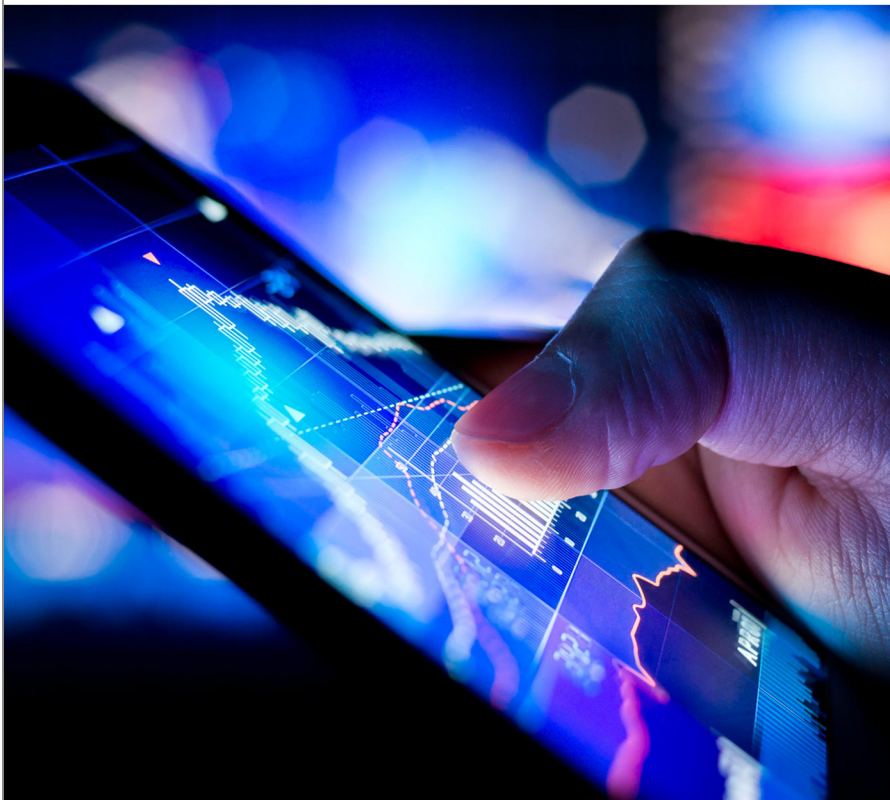


Liquidity management



Liquidity management



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Introduction

In this free course, *Liquidity management*, you will focus on liquidity, one of the fundamental aspects relating to risk management that has come under intense scrutiny in the past few years.

This OpenLearn course is an adapted extract from the Open University course [B862 *Derivatives and risk management*](#).

Learning Outcomes

After studying this course, you should be able to:

- understand the nature of liquidity risk
- understand methods that can be used to measure exposure to liquidity
- review how organisations manage their exposure to liquidity risk
- appreciate how liquidity risk can be managed through the effective structuring of assets (particularly liquid assets) and liabilities (particularly debt liabilities)
- understand methods employed by banks and other financial institutions to manage their liquidity.

1 Liquidity management

The following sections introduce and define liquidity risk, providing a series of explanatory contexts and scenarios to outline the strategies that organisations use to try and effectively manage it. A short case study towards the end of these sections illustrates some of the problems that can face companies characterised by inadequate levels of liquidity. In addition, some ideas about how organisations can access different credit facilities are discussed.

1.1 Liquidity risk

Liquidity risk applies to all organisations. International Financial Reporting Standards (IFRS, 2010, p. 12) defines liquidity risk as the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset. Such circumstances may signal the termination of the business with the organisation required to cease trading, wind up the business and distribute the residual assets to creditors in accordance with their ranking. Alternatively, a liquidity crisis could result in a major restructuring of the financial base of the organisation – either through the taking on of new debt or through a new share issue.

The way liquidity risk can be (or has to be) managed varies between different sectors and may also reflect the size of the organisation. For small organisations, management of liquidity risk often comes down to cash flow management over a fairly short time period. With no long-term debt, such organisations may find that liquidity problems simply arise through mishandling of its trade flows – having to meet obligations to creditors or suppliers ahead of receipt of payments by customers. Indeed, many businesses manage their cash flows with the intention of using them to provide liquidity by operating with ‘negative working capital’. This is where the outstanding amounts due to creditors, or accounts payable, exceed those due to be received from debtors, the accounts receivable, plus the financial value of inventory. In these circumstances, the organisation’s creditors are, in effect, providing free finance for the business! This ideal situation is unfortunately difficult to achieve in the real world.

Even for larger organisations – particularly those with large daily flows of business and a high number of suppliers, such as supermarkets – there is exposure to the risk of mismanagement of the cash flows arising from business operations.

1.2 Liquidity management: structuring the balance sheet

The last thing any organisation wants to do when it comes to liquidity management is to go begging to its bankers when a cash flow crisis has already arisen. Under such circumstances the bankers may firstly question the abilities of the company’s management as cash flow management is a critical requirement of any management and, in any case, may be reluctant to extend additional credit or may only provide it on punitive terms.

Therefore, if you were managing your organisation's liquidity, what general rules should you apply to the management of its sources of funds?

First, you need to make projections of the organisation's forward cash flows. This should be for as long a forward period as is practicable given the nature of the business. At the very least, it should cover a period of one year forward. The analysis should not only identify in calendar terms, and usually at least monthly, when liquidity is limited, but should also give a measure of the volume of funding sources that need to be available to avoid a cash shortage. The projection also needs to identify the peaks and troughs of cash flow, if any, within the period. Forecasting month-end positions may be misleading if the intra-month pattern is outflow in the first half and inflow in the second.

You need to maintain funding capacity that is ideally well in excess of this worst case cash flow scenario. Many companies will plan to use only a designated percentage (e.g. 75%) of any overdraft facilities, with the remaining 25% available for unforeseen eventualities. Planning for your funding needs one or more years ahead is sensible, although this will probably mean that a portion of the funding sources established are not drawn on. Having excess liquidity, however, may involve costs such as fees to banks for maintaining undrawn facilities and interest on loans which are drawn, but the cash is retained in the company as surplus rather than being invested in, for example, capital requirements. So, the amount of the cushion to be maintained must be evaluated closely.

Maintaining a prudent maturity profile for funds is also necessary. Do not have all the financing or borrowing facilities maturing at around the same time. Being forced to renegotiate all or a majority of your funding simultaneously is risky. This is particularly the case if the business is performing weakly or if general credit conditions for raising funds are difficult. Organisations should ideally ensure that the maturities of funds are spread over a number of years with a suitable proportion being long-term funds: that is, with a residual term to maturity over more than one year.

If the organisation is large enough, you should seek to fund it from a number of markets rather than just a single market. (Similarly, a large organisation should have relationships, and borrowing facilities, with a number of banks rather than just one or two.) For example, larger organisations will fund in the United Kingdom, Euro and US markets, and probably in different currencies depending on the nature of the organisation's operations. This diversification means that if trading conditions become difficult in one market the organisation can switch to drawing additional funds from other markets where trading conditions are agreeable. In market conditions following the global banking crisis in 2007, however, all the major markets experienced difficult trading conditions. This reduced the options at the disposal of organisations to raise funds.

Covenants and conditions in loan documentation specify that a borrower commits to perform within defined criteria. For example, a maximum gearing ratio or debt/operating income ratio or interest cover, or even a combination of ratios (financial covenants). By maintaining such performance requirements that are designed to ensure the continued financial robustness of the organisation, the lender gains comfort that the borrower should remain solvent and capable of repaying its debts and if this turns out not to be the case, the lender can act accordingly at the earliest possible moment.

As far as allowed by those lending to your organisation, you should seek optionality or flexibility in the terms or conditions of the relevant agreement documentation. An example of this is the issue of convertible bonds. Under the terms of the agreement governing the bonds there would be a provision whereby the bonds could be converted from bonds to equities in particular circumstances. This would, of course, instantly change the debt structure and the cash flow profile for an organisation. Of course, the lenders will seek to

have sufficient terms and conditions in the underlying agreement to protect their position and so, in addition to covenants regarding repayment, payment of interest etc. may also require covenants that require minimum performance levels and provision of regular updates regarding performance. If such covenants are not performed, the lender would usually have the right to call an 'event of default' and require early repayment of the outstanding loan which may, of course, create a liquidity crisis for the borrower.

Finally, while adhering to all the rules above, you should rank the sources of funds available in terms of comparative cost. Cost-effective debt management implies drawing on the cheapest funds first and the most expensive last. Care must be taken here: the cheapest funds are usually of a very short-term nature and over-concentration exposes the organisation to extreme refinancing risks. For example, agreed overdraft facilities are usually the cheapest form of lending available to most organisations, but the facilities can be withdrawn 'on-demand' by the bank and so it is unwise to rely solely on this form of financing.

1.3 Jarvis case study

Box 1 provides an example of a company which, after experiencing problems in its business operations, found its liquidity drying up. The company's cash position was, initially at least, rectified but only after a major restructuring of its capital base. Read the BBC News article below and then complete the activity underneath it.

Box 1: Debt worries hammer Jarvis shares



Figure 1 Engineering work carried out on a rail track

Shares in the engineering group Jarvis lost over half of their value on 2 July 2004 after the group warned that it was facing debts around a total of £230m. Charges and write-offs after it quit the rail maintenance business were compounded by problems at its accommodation services division. [...] The company said it had suffered 'a substantial outflow of cash' as it paid debts accumulated from its exit of rail maintenance in 2003 and the lower construction volumes in accommodation services. [...] Chief executive Kevin Hyde said, 'This is an extremely challenging time for the group and we are taking the necessary decisions and implementing them. Considerable progress had been made and further action is planned to ensure a leaner, more sustainable core business for the future'. Shares in Jarvis fell nearly 90% between January and July 2004. For several months Jarvis was in discussions with its banks to restructure its debts and provide it with liquidity to continue in business. In May 2005, Jarvis finally concluded its long-running talks with its bankers and they exacted a high price for all the debts they had allowed Jarvis to run up just to keep the business going. With subcontractors demanding payment up front and local authorities and other undertakings refusing to pay until they are fully satisfied with completed work, Jarvis had been caught in a vicious cash squeeze. All the main lenders, led by Deutsche Bank, agreed

to swap £297m of debt for shares equal to 95% of the company. Existing shareholders kept 4.75% and warrant holders 0.25%. The company stated after the debt–equity restructuring: ‘The directors acknowledge that forecasting in the group’s current position is inherently difficult, that financial headroom is minimal and so there is very limited margin to accommodate any adverse trading or other developments which might have an impact on the group’.

[\(Based on BBC \(2004\)\)](#)

Activity 1

Allow around 10 minutes for this activity.

Question 1

Having read the Jarvis case study in Box 1, who do you think were the winners and losers from the debt–equity restructuring?

Provide your answer...

Question 2

What does this tell you about the relative credit risks relating to investments in bonds and equities?

Provide your answer ...

Discussion

The debt–equity swap benefited the debt holders at the expense of the shareholders. The price exacted by the debt holders for keeping the company in business was 95% of the company’s shares. This meant that the existing shareholders’ stake was significantly diluted.

It could be argued, however, that the debt–equity swap kept the company in business – and this was a better outcome for existing shareholders than insolvency, which may have left them with a worthless investment. Indeed, debt–equity swaps are a relatively common practice in situations such as this as there is an obvious benefit to both the debt holders and shareholders to try to keep the company alive if at all possible.

The example reminds us of how shareholders have the most subordinated position as investors in a company. In the event of a liquidation, they stand at the back of the queue – behind bondholders and all other debts and claims on the company – when it comes to any pay out from the demised company’s residual assets.

Unfortunately, the restructuring only provided a fairly short-term respite for Jarvis. The company went into bankruptcy in March 2010 after negotiations with its banks and other lenders made it clear that Jarvis would have insufficient liquidity to continue to operate its business as a ‘going concern’.

1.4 Stand-by credit facilities

As part of their liquidity policy, many organisations hold stand-by credit facilities. These are effectively unused loan facilities that organisations draw on when they are short of funds.

When these loans are drawn, the bank normally charges interest at a margin over the prevailing money market rate charged by banks to other financial institutions borrowing money – like LIBOR (London Interbank Offered Rate) or EURIBOR (Euro Interbank Offered Rate). So the overall rate is expressed, for example, as three-month LIBOR + x%.

When they are undrawn, that is, not used, the bank will still normally charge the organisation a small amount (for example, 0.25% p.a. or 0.50% p.a.) for providing the commitment to having the facility available on stand-by. Indeed, banks providing such commitments may have to put aside part of their capital in respect of the commitments made.

Activity 2

Allow around 5 minutes for this activity.

Attempt to answer the following questions.

What determines the size of the margin charged over LIBOR by the bank for a credit facility?

Provide your answer...

Discussion

The size of the margin over LIBOR is the credit spread sought by the bank. The tighter the general credit conditions and/or the weaker the creditworthiness of the borrower, the higher the spread charged. Note, though, that the process of establishing facilities involves negotiations between the bank and the organisation. Consequently, the organisation does not just automatically have to take the terms offered by the bank – particularly if they have a good credit standing and a strong financial position. Clearly, the greater the degree of competition between banks the better placed the borrower will be to negotiate the margin downwards.

Banks usually like to have the scope to renegotiate facilities each year.

Why do you think this is the case?

Provide your answer...

Discussion

Banks like to have the capacity to renegotiate a loan facility each year to give them scope to change terms – including the interest rate charged. In any case, it is common for facilities to have a term of 364 days (i.e. less than one year). This is particularly the case under the old international banking rules known as Basel 1, where the provision of facilities of up to 364 days did not require the bank to hold capital to support the

loan, whereas capital is required for facilities of a term greater than 364 days (i.e. one year or more). Changes to the terms of a loan facility would be sought if the credit standing of the organisation requiring the facility had altered. Indeed, if it had changed for the worse the facility may not be renewed at all.

2 Managing investments and cash resources

Capacity to contain liquidity risk arises on the asset side of the balance sheet.

Organisations may have investments of their own arising from the cash resources they have generated over the years from undistributed profits. If these are not needed for working capital, an organisation can invest this cash in a number of assets, ranging from short-term money-market investments (for example, depositing the funds with a bank for a one-month term) or in longer-term investments such as bonds and property.

To ensure that these resources can be made available to assist if a liquidity crisis arises, the following practices should be applied. At least some investments should be made in liquid assets, i.e. those assets that can be converted into cash at short notice for a predictable value. This would make investments in cash deposits (other than very short-term deposits) questionable. As seen above, cash deposits are for a fixed term and cannot normally be broken, which is not much help if you want to gain access to the cash. The better alternative may be to invest in negotiable money-market assets such as certificates of deposit (CDs). Holdings of long-term bonds may, in theory, be sold prior to maturity, but a liquid market can only be assured if the issuers have good credit quality and the bond issue itself is large and regularly traded, e.g. UK Government Bonds (also known as 'Gilts'). Indeed, during the 2007/08 financial crisis many bond markets became illiquid with investors unable to find buyers for their assets. Additionally, the market value of bonds may be particularly volatile, similarly Gilts if interest rates are volatile.

This means that there will be uncertainty about the proceeds that may be realised by their sale in the event of a liquidity crisis. Investments in property are not usually considered liquid assets since, in a crisis, you may be unable to sell such assets quickly. In short, the composition of the investment portfolio requires care when considering both its maturity profile and its marketability.

Care should also be taken with the credit quality of the assets held. Indeed, many organisations will not invest their liquid assets in bonds with less than an AA long-term rating. We will learn more about credit ratings later. Liquid assets should not be held in bonds of poor credit quality whatever the apparent attractions in terms of their high yields. Such speculative investments are the preserve of sophisticated investment funds – or at least they should be! Even if the issuer of low quality bonds does not go into default, the potential for adverse movements in the bonds' credit spreads during their life exposes the investor to making a loss on the investment if they are a forced seller at a time when the bonds' price has slumped and when poor liquidity in the bonds might have depressed prices even further. This is in addition to the previously mentioned risk to the value of a bond holding arising from investing in assets of a long duration.

The guidelines provided above about the appropriate way to manage the composition of a portfolio to avoid liquidity issues really amount to common sense. Maintain deep sources of funding in various markets with an average maturity which is not too short and hold liquid assets in low-risk investments that can be converted quickly into cash. Both making your liquid assets realisable and putting off the day you need to renegotiate your funding help to maintain liquidity.

3 Liquidity management: stress testing

Every organisation should have in place a contingency funding plan – a statement of how it would cope with an adverse movement in cash flows. Table 1 provides an outline of how such a contingency funding statement could look.

First, liquidity conditions are measured under both normal and adverse business conditions. In adverse conditions, an organisation would expect to have lower cash inflows arising from its business activities because of lower sales and/or lower prices than under normal conditions. Additionally, it might expect its access to funds to be reduced owing to the reduced appetite of lenders to fund the organisation during an adverse trading environment. For the purposes of this exercise, it is assumed that unavoidable capital expenditure and holdings of liquid assets are unchanged between the two scenarios.

From these data, the organisation can assess how much cover it has from a combination of funding sources and liquid assets relative to its operating net cash flow. The management of the organisation (the board or its equivalent) can then set a minimum acceptable ratio of funding sources plus liquid assets relative to any negative cash flow. The objective is to ensure that this ratio is sufficiently high to ensure its continued survival during a prolonged period of adverse (or stressed) trading conditions.

Table 1: Liquidity management matrix

	Normal trading conditions	Stressed trading conditions
Free cash flow from operations (lower than X)	X	M
Unavoidable capital expenditures	Y	Y
Net cash flow	$X - Y$	$M - Y$
Support from sale of liquid assets	A	B (lower than A)
Support from additional borrowing	C	D (lower than C)
Available liquidity from assets and borrowings	$A + C$	$B + D$
Liquidity plus net cash flow	$(A + C) + (X - Y)$	$(B + D) + (M - Y)$
Term until exhaustion (if net cash flow is negative)	$(A + C) / (X - Y)$	$(B + D) / (M - Y)$
Minimum term to exhaustion of cash	Board to define	Board to define

A golden rule is to apply caution to the expected cash inflows: for assets that you envisage selling to raise cash it is appropriate to apply a worst-case analysis. This is because a forced sale of assets, where you need the cash quickly, is unlikely to raise as much cash as when assets are sold in non-emergency conditions. One way to accommodate this in liquidity management is to apply haircuts (or discounts) to the expected value of assets sold in difficult market conditions or at times when the organisation in question is known to be a 'forced seller'. These haircuts are an estimate of the discount that may have to be applied to ensure a sale. More liquid assets should attract small haircuts – say up to 10 per cent of prevailing market value. Less liquid assets

require a larger haircut to be applied for liquidity planning purposes – with discounts of up to 30 per cent or more of prevailing market value being prudent.

The liquidity management matrix shown in Table 1 is a simplified example of how an organisation can measure its exposure to liquidity risk and, ideally, manage that risk effectively. The example, though, reinforces two important points about liquidity management: first, it involves managing the maturity profiles of both assets and liabilities; second, there should be a policy approved by the board of an organisation (or its equivalent) to ensure sufficient liquidity is maintained on an ongoing basis.

4 The financial crisis and liquidity reform

The global financial crisis from 2007 resulted in a major liquidity crisis in the banking sector, threatening the solvency of many banks in Europe and the United States.

The crisis had its roots in the collapse of the subprime mortgage market in the United States in 2007. This was caused by the earlier underwriting of a large volume of subprime mortgages and a rise in mortgage interest rates in the US. Many banks were exposed to this market, largely through their holdings in mortgage-backed securities (mortgage-backed securities are bonds supported by claims on the cash flows from mortgage loans through a process known as 'securitisation'), which fell in value due to defaults on the underlying mortgages. In this environment banks became increasingly reluctant to lend to each other, given fears that they may be lending to those institutions with material exposures to the collapsed mortgage market. (Due to the complexities of the securitization and credit default swap markets, there was no way of knowing which institutions held the final exposures.) So many banks found it difficult to borrow. However, to compound the issue, significant volumes of the so-called liquid assets (e.g. highly rated bonds, particularly from securitization vehicles) that the banks were holding became unmarketable – and so could not be used to raise cash. Clearly, the liquidity regulations that financial services industry regulators had imposed on banks and other financial institutions were found to be failing during the financial crisis. With many banks unable to raise new funds or generate cash by selling their liquid assets, an insolvency crisis loomed and had to be resolved by governments and their regulatory bodies. This took the form of both providing short-term loans to the banks and allowing financial institutions to swap – for up to three years – certain of their bond holdings for high quality, and marketable, treasury bills (i.e. short dated paper issued by the Government). In the UK, the Special Liquidity Scheme, organised by the Bank of England, ran from 2008 until 2011 bringing liquidity back for the banks and renewing market confidence.

The failure of the existing liquidity requirements for banks during the financial crisis prompted regulatory authorities to revise their thinking about their requirements for holding liquid assets. In the UK, the answer to this matter was produced by the then regulator, the Financial Services Authority (FSA).

Primarily as a result of the financial crisis, the FSA was disbanded in 2012. This resulted in the supervisory responsibilities for financial organisations in the UK being passed to the newly formed Prudential Regulation Authority (PRA), a subsidiary of the Bank of England. Other activities of the FSA were passed to another newly formed body, the Financial Conduct Authority (FCA).

In 2010, the FSA introduced the Individual Liquidity Adequacy Standards (ILAS) regime for banks and other UK lenders. The approach taken reflects many of the underlying principles of good liquidity management identified in this course. Under ILAS, each bank has to undertake a stressed assessment of their potential exposure to cash outflows over a short-term period. This involves estimating the risk of outflows arising from ten sources of liquidity risk defined by the FSA (see Box 2). Following review by the FSA, the process then defines the minimum volume of the buffer of liquid assets that the bank must always hold, which is confirmed by the FSA and monitored through regular reports by the bank to the FSA.

Because banks, even in normal business conditions, periodically have to draw on some of their liquidity to accommodate cash outflows, the implication is that banks have to hold an additional store of liquid assets over and above the permanent core buffer. The inevitable

consequence was that many banks found that under the new regime they were required to hold larger volumes of liquid assets than was previously the case.

Box 2: Addressing liquidity risk in the UK

The FSA's ten potential sources of liquidity risk are:

- Wholesale funding risk – the loss of availability or outflow of funds from institutions
- Retail funding risk – the loss of availability or outflow of funds from the public
- Intra-day liquidity risk – the exposure to the loss of funds on a particular day
- Intra-group liquidity risk – the risk of insufficient cash being available for each part of an organisational group
- Cross-currency liquidity risk – the risk of being unable to meet cash requirements arising in foreign currencies
- Off-balance sheet liquidity risk – the cash requirements arising from 'off-balance sheet' transactions
- Franchise-viability risk – the risk of the loss of funds arising from a reduction in the size of franchise in retail funding markets
- Marketable assets risk – the risk that assets held for liquidity purposes cannot be sold to raise cash
- Non-marketable assets risk – the risk that other assets, not primarily held for liquidity purposes, cannot be sold to raise cash
- Funding concentration risk – the risk of a rapid fall in funding due to significant proportions of funds being repayable within short time periods.

Additionally, the FSA tightened up policy on the types of assets which could be held as liquidity. Under the previous regimes, liquidity could, at least in part, be held in the form of bank debt (such as certificates of deposit) and company debt (commercial paper). Yet these assets proved to be non-liquid during the financial crisis and were thus deemed to be inappropriate for the new liquidity buffers. Under UK regulations, only high credit-quality government and supranational securities and deposits with high credit-quality central banks are permitted for inclusion in the liquidity buffer on the basis that, in a financial crisis, these are the only financial assets that may remain liquid (i.e. capable of being sold for cash).

(Source: Financial Services Authority, 2009)

5 IFRS and liquidity

When we examine financial risks we also need to look at what organisations are expected to disclose about them in their financial statements under International Financial Reporting Standards (IFRS). The key document here is Standard 7 (IFRS 7) which deals with disclosures about financial instruments. In doing this we are not just identifying accounting requirements that organisations must abide by: we are also examining risk management. The disclosures on financial instruments, specified in IFRS 7, enable investors and other stakeholders to have information about how an organisation manages its risks and what exposure to financial risks it has. The fact that these disclosures have to be made will, therefore, help to prescribe how organisations go about the business of managing their financial risks.

In respect of liquidity risk, paragraph 39 of IFRS 7 states that entities should disclose:

- a maturity analysis for financial liabilities that shows the remaining contractual maturities; and
- a description of how it manages the liquidity risk.

Appendix B of IFRS 7 then goes into some detail about how this contractual maturity analysis should be prepared. The expectations are that:

- the maturity analysis should use time bands (e.g. up to one month; one to three months; three months to one year; one year to five years)
- the maturity analysis should be at the earliest possible contractual date at which the entity can be required to repay its liabilities
- the amounts disclosed should be the actual contractual cash flows and not the discounted value (i.e. the present value) of these future cash flows
- the analysis should separately disclose the cash flows arising from the use of derivative financial instruments (like foreign currency swaps) that the entity may have employed in structuring its liabilities (e.g. where a foreign currency swap – or FX swap – had been used to change the currency exposure arising from the issue of a bond)
- where amounts are not fixed (e.g. where the liability is linked to an index) the cash flow reported should be based on the level of the index (or other determinant of the amount) at the end of the financial reporting period (e.g. year-end).

5.1 Case study – BP strengthens its liquidity position

This next activity focuses on BP.

Activity 3

Allow around 30 minutes for this activity.

BP required significant additional liquidity after being faced with exceptional costs related to the Gulf of Mexico oil spill in 2010. From p. 90 of its Annual Report and Form 20-F (2012), identify the various steps the company has taken to-date to strengthen its liquidity position. Make notes in the box provided below.

Provide your answer ...

Discussion

BP took the following steps to address its liquidity needs.

1. The company renegotiated its committed bank facilities during early 2011, putting in place \$6.8 billion of facilities with 23 international banking counterparties for a term of three years.
2. It continued to strengthen its access to commercial bank letters of credit (LC) and at the end of 2012 had in place committed LC facilities of \$6.9 billion and secured LC arrangements of \$2.2 billion, to supplement its uncommitted and unsecured LC lines.
3. It completed a \$38 billion disposal programme a year ahead of schedule, including \$15 billion during 2012, following \$2.7 billion of receipts in 2011 and \$17 billion in 2010.
4. In addition, the company will benefit from further financial flexibility once the proposed sale of its 50% share in TNK-BP to Rosneft is completed. The company had already received a \$709 million dividend from TNK-BP in December 2012 and it expected to receive a further net \$11.6 billion cash on completion, which was anticipated in the first half of 2013.
5. BP also accessed US, European and Australian capital markets with bond issuances amounting to \$11 billion in 2012 alone.
6. Finally, BP repaid the remaining balance of \$2.3 billion on the \$4.5 billion of borrowings raised in 2010 that were backed by future crude oil sales from BP's interests in specific offshore fields in Angola and Azerbaijan.

5.2 Determining liquid assets

This next activity concerns deposits.

Activity 4

Allow around 30 minutes for this activity.

Information

To determine the amount of liquid assets they should hold, financial institutions in the UK have to divide the deposits placed with them by individual savers into two categories.

These two categories are:

- Type A deposits – there is a relatively high risk of the savings being withdrawn by customers – otherwise known as ‘non-sticky deposits’.
- Type B deposits – there is a relatively low risk of the savings being withdrawn by customers – otherwise known as ‘sticky deposits’.

To determine the categorisation, financial institutions consider various features of their savings products and customers including whether:

1. The product is an internet-based savings account.
2. The product is a non-internet-based savings account.
3. The product is one where deposits and withdrawals are highly sensitive to interest rate movements.
4. The product is one where deposits and withdrawals have low sensitivity to interest rate movements.
5. The size of the deposit is above the maximum limit for compensation if the financial institution defaults.
6. The size of the deposit is not above the maximum limit for compensation if the financial institution defaults.
7. The customer has had a long-term relationship with the institution.
8. The customer has had a short-term relationship with the institution.
9. The deposits may be withdrawn (with or without a withdrawal charge) prior to the end of the product's contractual term.
10. The deposits may not be withdrawn prior to the end of the product's contractual term.
11. The deposits are held in an account used for day-to-day transactions.

Question 1

Which of the features above would normally lead to a Type A – high risk of withdrawal – categorisation and why? Which would lead to a Type B categorisation and why?

Provide your answer...

Question 2

What are the implications for financial institutions that have a high proportion of Type A products in the total of deposits held?

Provide your answer...

Discussion

Type A deposits are those with a high potential risk of withdrawal at short notice by customers. These would usually include the deposits which have the features 1, 3, 5, 8, 9 and 11. In respect of feature 5, the amount vulnerable to withdrawal at short notice may be only the excess over the compensation limit, and so part of the deposit may be considered 'sticky' and part 'non-sticky'.

Type B deposits are those considered to be less vulnerable to rapid withdrawals by customers. These would usually be those with features 2, 4, 6, 7 and 10.

The process of categorisation is not straightforward since most savings products have more than one, and often several, of these 11 features listed. Consequently financial institutions have to consider the features of their products carefully – and with some

subjectivity – when making their Type A and Type B classifications. The regulator (the FSA and subsequently the PRA) would require justification from each institution as to the categorisation which that institution determines as appropriate for their Type A and Type B classifications, i.e. there is no universal set of specific 'rules' that can be universally applied.

For institutions holding a high proportion of Type A deposits there is a higher than average risk that deposits could be quickly withdrawn by customers. The institution has a raised exposure to liquidity risk. Such institutions are therefore required to hold higher amounts of liquid assets. These can be drawn on to meet adverse movements in cash flows arising from the withdrawal of deposits by customers.

Conclusion

This short course explored the vital issue of liquidity risk management. Any organisation's worst nightmare is to find itself facing a liquidity crisis and begging its bankers when a cash flow crisis has already arisen. Under such circumstances bankers often question the abilities of the company's management at cash flow management and are reluctant to lend unconditionally further money to the organisation. The management needs to make projections of the organisation's forward cash flows and maintain funding capacity that is ideally well in excess of this worst case cash flow scenario. Maintaining a prudent maturity profile for funds is also necessary, and if the organisation is large enough, it should seek to fund it from a number of markets rather than just a single market. Flexibility in financing is crucial, so as far as allowed by those lending to the organisation, the latter should seek optionality or flexibility in the terms or conditions of the relevant agreement documentation. While adhering to all the rules above, the management should of course rank the sources of funds available in terms of comparative cost.

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'Debt worries hammer Jarvis shares' (adapted from BBC News (2004))

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