

n the first article in this series (see page 42 of *The Treasurer*, March 2013) we looked at the benefits to an organisation of producing cash forecasts. Now we will consider how we might produce a short-term forecast.

The key objectives of short-term cash forecasts are to:

 Optimise liquidity across the organisation by ensuring that cash is in the right place at the right time and in the right currency to maximise use of internal cash resources.

 Avoid expensive, unanticipated overdrafts by sourcing additional funds or by taking some other appropriate action (for example, delaying payments).

 Enable surplus funds to be invested in the most efficient manner by minimising idle balances sitting in non-interest or low-interestbearing accounts.

Generally, some version of a receipts and disbursements model is used to predict shortterm cash requirements. While the objective is to forecast short-term cash flows as accurately as possible, given the complexities in obtaining accurate data, such models are often limited in outlook to just a few days or sometimes a few weeks.

The period covered by a short-term forecast will largely be determined by the terms of the organisation's borrowing and investing arrangements. For example, if an organisation is required to give five days' notice of a drawing under its revolving credit facility, any forecast will need to extend beyond five days to allow sufficient time to give notice to lenders.

#### How to create a forecast

The precise details included in the forecast and the process used to compile it will vary from company to company, but should be based on:  Data provided from the banks on opening balances on bank accounts and items due to clear today.

 Operating unit cash. People involved in actually managing the cash flows should prepare these and they need to include both recurring and one-off items. (Enterprise resource planning systems may be useful, but human experience is invaluable.)

 Treasury transactions – information on treasury deals due to settle or mature today is generally provided by the treasury management system.

Finance transactions – one-off items (for example, an acquisition or tax payment) may be provided by central finance or individual departments (the entire organisation has to be aware of the need to inform treasury of a forthcoming cash flow).

Ideally, the short-term cash forecast should be updated on a daily basis, although this may not be practical in all cases.

# Considerations when preparing a short-term forecast

To be useful, a forecast needs to be accurate, but any of the following issues can materially affect the reliability of short-term cash forecasts:

◆ Material omission – the major risk with short-term cash forecasts is that they contain a material omission or error, whether a payment or receipt. This might be identified by variance analysis, but generally the treasurer has to use judgement in assessing whether the forecast is consistent with their experience of cash movements in the business.

◆ **Double counting** – as with material omissions, double counting can also cause major difficulty. Treasury needs to ensure that any amounts paid

centrally (for example, payroll or suppliers) are not also counted by the operating unit.

◆ Foreign currencies – treasury must be able to see the underlying currency cash flows so that shortfalls and surpluses can be managed effectively by currency. The currency of any given flow may be disregarded by finance managers who tend to work only in functional currency and so treasury should regularly remind them of the need to be aware of underlying currency.

◆ Intragroup transactions – in complex groups, this is often a major issue as it is notoriously difficult to reconcile intragroup transactions. But it is essential that these are eliminated, if appropriate, before compiling the group cash forecast. This is one area where having the identity of the currency moving is particularly critical.

◆ **Cut-off errors** – if cash has been received at the bank, but has yet to be accounted for, or vice versa, there is a risk that it is included in the cash forecast as if it will be received again.

◆ Lack of interest by contributors – cash flow forecasts are prepared by many contributors, often as a low priority. There is a significant risk that data is inaccurate, late or is never submitted. Therefore good communication should exist between the treasury, finance and business units to reinforce the importance of the process for the organisation as a whole. It is helpful to ask operating units for an explanation of any significant variances to promote continual improvement in forecasting (and as a reminder that the forecasts are actually being used).

All of the above mean that any data that is included in the forecast needs to be monitored and compared with actual data and adjustments made in the light of

# The lifeblood of liquidity

SHORT-TERM CASH FLOW FORECASTS NEED TO BE MONITORED AND COMPARED WITH ACTUAL DATA AND ADJUSTMENTS MADE IN THE LIGHT OF EXPERIENCE, SAYS SARAH BOYCE

## **EXAMPLE 1**

FROM BANK

	Day 1	Day 2	Day 3	Etc
RECEIPTS				
<b>Operating unit cash flows</b>				
Cash sales				
Receipts from customers				
Miscellaneous income				
Treasury transactions				
Borrowings				
Maturing investments				
Interest receivable				
Other treasury receipts				
Finance transactions				
Dividend income				
Sale proceeds				
Operating				
Tax receipts (tax recoverable)				
Royalties				
Rental income				
Other income				
Total receipts				
DISBURSEMENTS				
Operating unit cash flows				
Payroll				
Supplier payments				
Taxation				
Miscellaneous payments				
Treasury transactions				
Debt repayment				
Investments placed				
Interest payable				
Other treasury payments				
Finance transactions				
Asset acquisitions				
Lease payments				
Tax payments				
Dividends				
Other payments				
Total disbursements				
Net cash flow in/(out)				
Opening cash/(borrowings)*				
Closing cash forecast				

### EXAMPLE 2

	Day 1 (000s)	<b>Day 2</b> (000s)	Day 3 (000s)
Cash at beginning	200	460	(240)
Cash receipts	2,000	2,200	1,900
Cash payments	(1,740)	(2,900)	(2,000)
Cash at end	460	(240)	(340)
Minimum cash reserve	(100)	(100)	(100)
Forecast cash deficit (to fund)	-	(340)	(440)
Forecast cash surplus (to invest)	360	-	-

experience. For example, close liaison with the accounts payable and receivable teams will provide accurate estimates of payment and receipt patterns where there may be peaks at the end of the month when customers pay their bills and the organisation also makes its disbursements.

The following pro forma can be adapted to the requirements of the individual's organisation:

# Example 1: Pro forma receipts and disbursements format

Once the forecast is compiled period by period, showing whether the organisation is expected to be in a surplus or deficit position at the end of each period, some companies will factor in a minimum cash holding to cover unforeseen circumstances (headroom), while others may seek to run cash at zero or slightly overdrawn – a decision to be based on a clear understanding of just how accurate the forecasts are.

# Example 2: Receipts and disbursements forecast

In day one, if cash carried forward from the previous period is 200, cash receipts are expected to be 2,000 and outgoings 1,740, the cash balance at the end of the period will be 460. If company policy is that there must always be a minimum balance at the bank of

100 (headroom), there will be a forecasted 360 surplus available for investment at the end of the day.

For day two, the 'cash at end' balance in day one of 460 (which does not include the cash reserve) is brought forward from the previous period, to the 'cash at beginning' balance for day two. The forecast shows an end-of-period deficit of 240. The cash reserve is extended for all periods, meaning that the forecast for day two is a deficit (and hence borrowing requirement) of 340.

#### Summary

The level of detailed information needed for a receipts and disbursements model, while of huge benefit for short-term forecasts, is rarely suitable for long-term forecasting since the costs of establishing an accurate forecast in this way will generally outweigh any benefit.

Therefore, for longer-term forecasts, the starting point is generally the management (or, less commonly, the statutory) reporting statements, which are then rolled forward over a number of periods using a series of high-level assumptions.

In the next article we will look at long-term forecasting, which is particularly relevant for strategic planning of funding needs, but also for the long-term strategy of the organisation. •





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