A brighter forecast

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EXPLAIN HOW AUSTRALIAN RETAIL PROPERTY GROUP WESTFIELD USES SPREADSHEET TECHNOLOGY TO MEET THE CHALLENGE OF LONG-TERM TREASURY FORECASTING.

At Westfield we have overcome the challenges of long-term treasury forecasting problems (see *Box 1*) by combining the core functionality of a treasury risk management system with a robust spreadsheet framework. The result has not only significantly reduced the risk in our forecast process but also provided a platform for more sophisticated and targeted analysis. This benefits the organisation and frees up staff to spend time on more meaningful, relevant and ultimately rewarding work.

UTILISING THE TREASURY RISK MANAGEMENT SYSTEM Our idea is simple: use the system to project cashflow, profit and loss (P&L) and balance sheet over the forecast period and combine this with forecast cashflows from the underlying business.

Getting the system to do the grunt work has two big benefits:

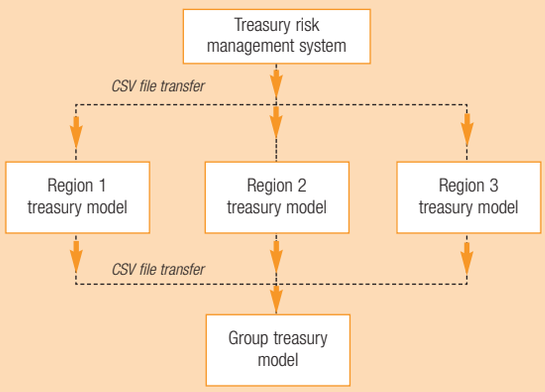
- The integrity of the treasury risk management system accurately represents our large, complex and dynamic treasury portfolio; and
- The system consistently applies our forecast market rates across the portfolio, ensuring that cashflow, P&L and balance sheet projections fully reflect our underlying (and easy-to-change) assumptions.

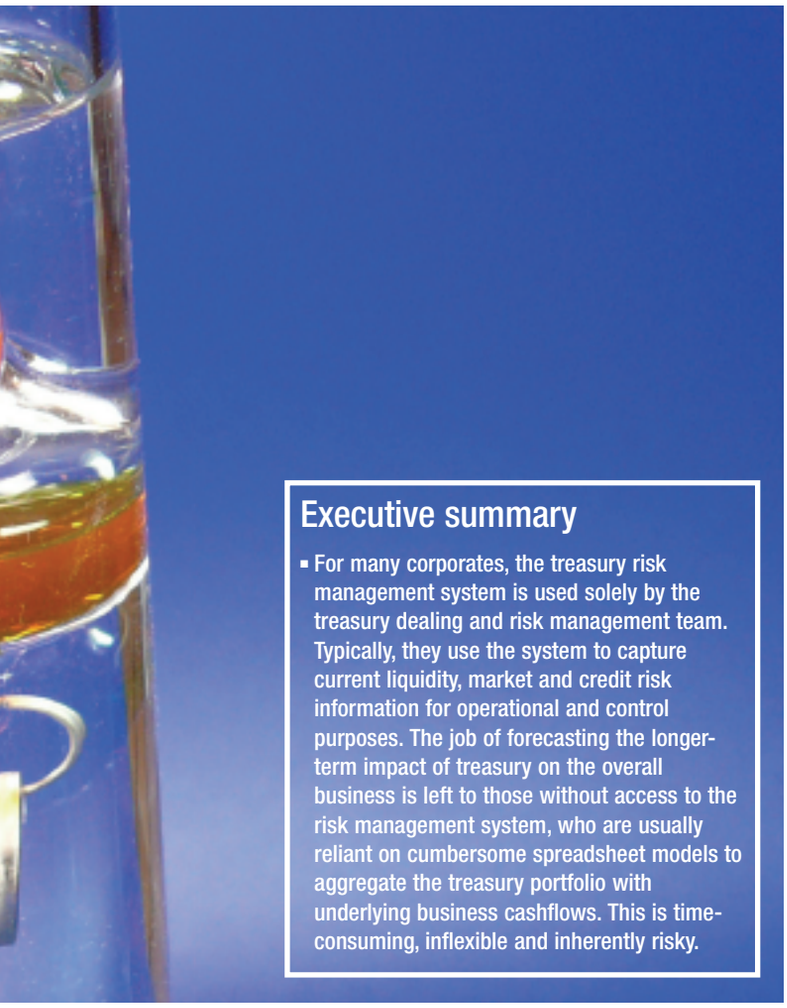
INCORPORATING UNDERLYING BUSINESS PERFORMANCE The next step is to incorporate underlying business cashflows into the forecast. The treasury team use short-term forecast business cashflows in the treasury risk management system for cash management. But due to the nature of long-term treasury forecasting we ask business units to provide forecast cashflows for the full forecast period.

Not surprisingly these cashflows are subject to many refinements, right up until the day we present to senior management, so we decided to model the treasury impact of these flows outside of the treasury risk management system. However, we do use the system to project a set of monthly forward interest rates over the forecast period which is applied to the business cashflows to estimate the future financing impact on treasury. Again, these rates are fully consistent with our underlying assumptions.

Data is transferred between the different treasury models via fixed-

Figure 1. Minimisation of spreadsheet risk





Executive summary

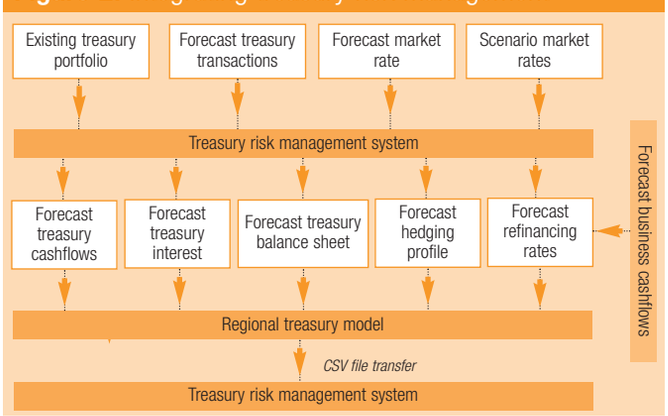
- For many corporates, the treasury risk management system is used solely by the treasury dealing and risk management team. Typically, they use the system to capture current liquidity, market and credit risk information for operational and control purposes. The job of forecasting the longer-term impact of treasury on the overall business is left to those without access to the risk management system, who are usually reliant on cumbersome spreadsheet models to aggregate the treasury portfolio with underlying business cashflows. This is time-consuming, inflexible and inherently risky.

format CSV files (comma-separated values) to ensure a complete data set is always captured. Files are time- and date-stamped to create an audit trail.

The Westfield business is split into regions so it makes sense to mirror this structure in the forecast model. To increase the flexibility of analysis, we apply multiple sets of category labels to reflect our accounting reporting, segmental reporting and hedging policies.

Each treasury model uses a set of pivot tables to link to its CSV file so the data set, despite its dynamic nature, is aggregated consistently according to our specific categorisation. The data can also be

Figure 2. Integrating treasury risk management



Box 1. Challenges of long-term treasury forecasting

- Integrating forecast treasury information with forecast data from the underlying business.
- Measuring the cashflow and profit impact of extensive and complex treasury instrument portfolios.
- Maintaining consistent assumptions across entities, divisions and regions.
- Isolating the drivers of cashflows and profit, and understanding variances to previous forecasts.
- Running scenarios under different interest and exchange rate assumptions.
- Modelling financial accounting splits of interest and debt such as minority interests and equity-accounted investments.
- Disproportionate amounts of time spent on maintaining the forecast process compared to performing value-adding analysis.

extracted from the pivot tables for use in subsequent analysis using the Getpivot spreadsheet function, which acts like a database Select query. This avoids some of the traditional spreadsheet weaknesses such as linked workbooks and absolute cell references.

STEPS IN THE FORECAST PROCESS

1 Take a 'snapshot' of the treasury portfolio by copying the 'production' or live database into a specially prepared forecast database;
2 Upload future derivative transactions into the forecast database using information on uncommitted future projects from the underlying business;
3 Input forecast and scenario rates into the forecast database;
4 Generate reports from the treasury risk management system for each region and output as CSV files. Upload this data into the respective regional treasury models;
5 Combine forecast cashflows from the underlying business with the projected treasury cashflows to create a monthly residual cash surplus or deficit over the forecast period; and
6 Upload the regional data to the group treasury model.

A POWERFUL MODEL All regional information is aggregated in the group treasury model and combined with recurring and one-off financial assumptions such as equity distributions and capital management initiatives. The impact of major transactions and capital scenarios are easily identified and key assumptions can be changed.

A set of standard forecast outputs such as interest and debt make up the base forecast. These are incrementally built upon to provide a range of analysis, including funding requirements, market sensitivity and hedging profiles. One example is interest and exchange rate scenarios, which can be run through the risk management system and the regional models to provide powerful comparative analysis.

Although we use the group model for high-level analysis we do not sacrifice detail. All regional data remains available in the group model and is highly structured according to our own categories. This data set, when aggregated using spreadsheet pivot table functionality, is available for analysis in multiple user-defined views. This increases forecast transparency and allows us to drill down and understand the drivers of cashflow and profit. Core outputs automatically fall out of the forecast process and more value-adding analysis can be undertaken.

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