

# Benchmarking Financial Performance at Michelin

## summary

In 2005, Michelin embarked on a project to reorganise its treasury, implement a new treasury system and centralise as many aspects of its financial operations as possible: cash management, risk management, financing etc. One of the objectives was to implement a more comprehensive risk management programme, one element of which was to benchmark the financial performance of the short-term interest rate portfolio, a project started in 2006. This article describes how this was achieved and the benefits which have accrued to Michelin as a result.

In 2005, Michelin embarked on a project to reorganise its treasury, implement a new treasury system and centralise as many aspects of its financial operations as possible: cash management, risk management, financing etc. Treasury now operates as an in-house bank, providing centralised hedging of its FX and interest rate exposures, central financing for group companies and cash pooling, including maintaining interest-bearing current accounts for group companies. One of the objectives in centralising Michelin's financial management was to implement a more comprehensive risk management programme, one element of which was to benchmark the financial performance of the short-term interest rate portfolio, a project started in 2006.

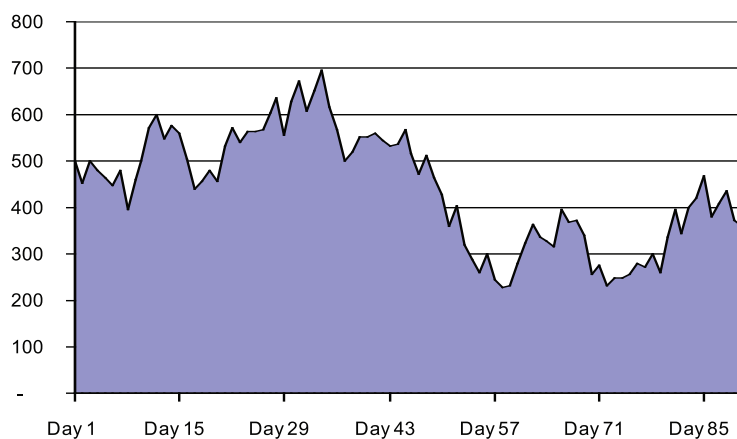
Companies generally have policy guidelines about the proportion of fixed and floating rate debt. Michelin's focus here is on short-term floating rate debt and daily liquidity management (defined here as financing up to 1 year). Like many companies, the floating rate portion of Michelin's portfolio is quite significant and furthermore, decisions have to be made based on a wide range of currencies. For example, should one currency be swapped against another? For how long should the company borrow - several months, or short overnight? In which currency/country? Centralised treasuries typically borrow on the market and then on-lend to subsidiaries via an in-house bank. This leads to the question of how to manage the maturity mismatch between what is borrowed centrally and what is lent to subsidiaries, particularly as interest is applied at overnight rates on the intercompany current accounts. There are several factors to take into account, and incorrect assumptions can have a significant impact.

Using a simple example (fig 1) for how long would treasury borrow? In this scenario, the assumption is that there are sufficient back-up lines to cover any liquidity shortfall, so there is no liquidity risk. It also assumes that the borrowing company has access to the overnight liquidity at a reasonable rate. Thirdly, transaction costs are not taken into account.

One possible strategy is to borrow as much as possible for the whole period i.e. 200m for 3 months and then adjust on a daily basis. Secondly, treasury could borrow for half the time e.g. 6 weeks and then renew if the financing requirement was then greater than originally anticipated. Thirdly, overnight funding could be sourced every day for the amount you needed (fig 2)

Which is likely to have proved the least expensive strategy? Should the company have borrowed overnight for the whole period to cover liquidity needs on a daily basis? Should the company have borrowed for 1 month or 3 months? To determine this, there needs to be a benchmark to compare all of these strategies and work out what would have been the best solution. Clearly hindsight is a wonderful thing, but benchmarking gives treasury the opportunity to review

Fig 1: Sample financing need forecast



Source: Michelin

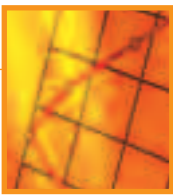
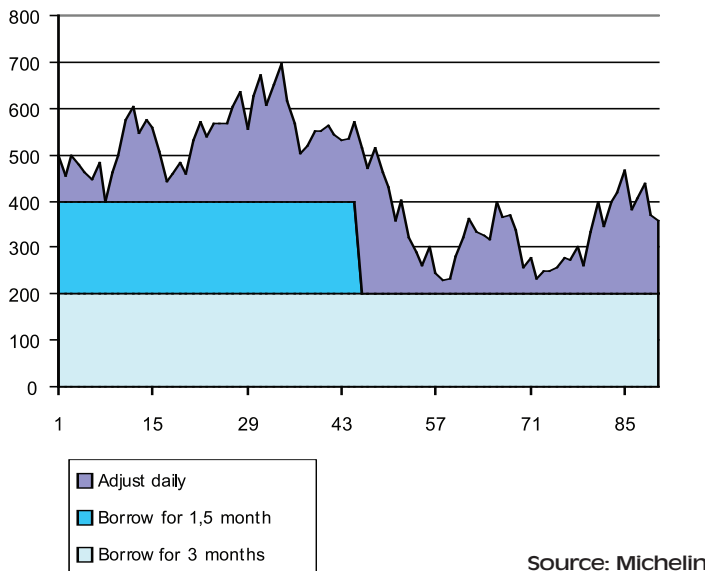
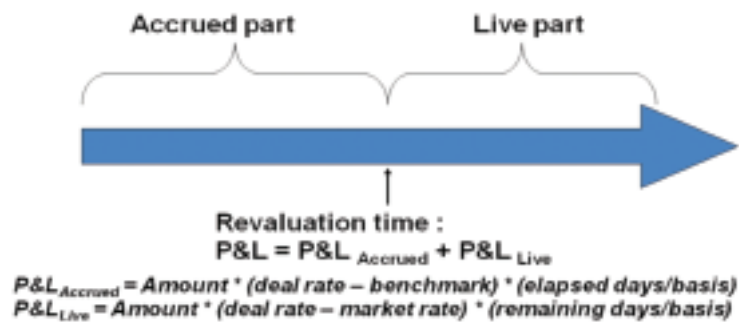


Fig 2: Possible funding strategy



Source: Michelin

Fig 3: P&L over the life of a deal



Source: Michelin

positions, track performance, analyse the decisions - ultimately improving performance without compromising the risk appetite. Essentially benchmarking comes back to two simple questions: Did treasury make the right decision for the company? If not, how should that inform the next decision?

For Michelin, it didn't make sense to set absolute targets when benchmarking; rather, treasury wanted to benchmark itself relative to the market rates, which is why

the company chose to finance using floating rate debt in the first place. The benchmark can be applied consistently to any type of financing as a way of deducing ultimately whether the chosen strategy was the right one. Using a benchmark such as 1 month or 3 month Libor may demonstrate good (or poor) performance at the start of the period, but if rates change during the borrowing period, the benchmark position can change significantly. The overnight

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index swap (OIS) market has developed tremendously in recent years. Spreads have become very tight (less than 1bp for short maturities) and the market now extends beyond the major currencies. Consequently, hedging against the overnight rate has become cheap and easy. Michelin's benchmark rate is based on an overnight compound index (EONIA or an equivalent).

Michelin uses SunGard's AvantGard Risk in which they can structure reporting and analysis by portfolio, instrument or whatever criteria may be relevant. All short-term money market instruments are included (short-term borrowings and investments, commercial paper, overnight index swaps and money market funds). FX spot and forwards and any other instrument held which affects the company's risk to overnight rates are also included. At any given point in time, the company needs to be able to find out their performance on the historic part of the transaction the remaining part is marked to market. Therefore, the P&L at any point is just the sum of the historic and future P&L (fig 4).

### The overnight benchmark

The overnight benchmark used can be applied to any type of financial instrument by converting everything into an interest rate measure. Commodities as investments are not included at present, although it could be done by using the closing price, for example, nor are balances on accounts included at this stage although again, this is a possible area for the future.

The compounding of the bench-

Fig 4: Example Benchmark Data, SunGard AG-Risk

| Currency    | Direction | Benchmark | TI | Rate        | Amount | Days | Notional | Open P.L. Base | Notional | Open P.L. Base | P.L. Base |
|-------------|-----------|-----------|----|-------------|--------|------|----------|----------------|----------|----------------|-----------|
| USD         | SOB       | Borrowing | FR | 4.2000      |        |      |          | 3.0            | 0        |                |           |
|             |           | Investing | FR |             |        |      |          | 3.2            | 1,103    |                |           |
|             | Total     |           |    |             | 132    |      | 6.2      | 9.0            | 0        | 623            |           |
| EUR         | SOBA      | Borrowing | FR | 34,804,765  | 2.9    |      |          | 5,812          |          |                | 1,803     |
|             |           | Investing | FR | 711,867,942 | 3.0    |      |          | 32,799         | 0.0      | 0              | 33,799    |
|             | Total     |           |    |             | 4.1    |      | 14,987   |                |          | 3,583          |           |
| GBP         | SOBA      | Borrowing | FR | 34,573,022  | 0.3    |      |          | 1,346          |          |                | 5,116     |
|             |           | Investing | FR | 3,023,736   | 0.7    |      |          | 33             | 3.0      | 0              | 73        |
|             | Total     |           |    |             | 11.3   |      | 1,380    | 3.0            | 0        | 5,200          |           |
| USD         | SOB       | Borrowing | FR | 842,066,482 | 4.9    |      |          | 26,417         |          |                | 78,802    |
|             |           | Investing | FR | 3,917,097   | 0.7    |      |          | 168            | 3.0      | 0              | 68        |
|             | Total     |           |    |             | 3.3    |      | 1,514    | 11.7           | 1,130    | 3,810          |           |
| Grand Total |           |           |    |             |        |      |          | 47,821         |          |                | 12,419    |

Source: Michelin

mark rate follows the overnight index swap convention i.e., each day is counted, including week-ends. A daily compounded value for a perpetual deal is calculated based on the previous day's rates (the value of which therefore increases every day). This is then imported into the system. The effective rate is deducted from the difference in value between T1 and T2 -  $(\text{value}_2/\text{value}_1 - 1) * (\text{basis} / \text{elapsed days})$ .

For the future part of the transaction, it doesn't matter which reference is used, so long as it is done consistently - in Michelin's case, the overnight indexed rate is used. Fig 5 shows an example benchmark analysis by currency, direction of funds and transaction type, but the same data can be viewed in a variety of ways.

### Results of performance benchmarking

Creating a benchmark analysis is



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not simply a passive calculation. There is a natural temptation for treasury to perform the same transactions every day and work in the same way as it has always worked. For Michelin, however, the aim is to use the benchmark to measure and then improve its operations. Through systematic benchmarking of its short-term transactions, the performance of front office and overall group performance is monitored. Based on the results from the benchmark, Michelin's treasury has become more selective about the choice of instruments used in given situations and also the choice of

counterparties. For example, where short-term borrowings are found to be more expensive than issuing CP, treasury's performance can improve by rebalancing the portfolio. □

This article is based on a presentation given by Paul Orsoni, Group Treasury - Front Office, Michelin, at SunGard Europa, June 2007



## Michelin

In 1889 two brothers, André and Edouard Michelin, embarked on one of the great human and industrial adventures of our times: one that shaped and continues to drive progress in modern means of transport through constant innovation. From the invention of radial tires to that of Pax System, and from the first gastronomic guide to the steel wheel, Michelin has played an active role at every stage of the automotive adventure. Michelin now manufactures and sells tires for all kinds of vehicles, publishes maps and guides and operates a number of digital services in more than 170 countries from China to Brazil and from the United States of America to Germany and Russia.