



## DCF / Valuation Case Study – Michael Hill – 90 Minutes – SOLUTIONS



### SITUATION OVERVIEW:

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Michael Hill [ASX:MHJ] is a leading jewellery retailer in Australia, New Zealand, and Canada.

The company earned revenue of \$576 million AUD, EBITDA of \$69 million, and Net Profit After Tax (NPAT) of \$35 million from continuing operations in its most recent fiscal year.

Michael Hill is already well-established in the ANZ region, and its businesses there are mature. The company sees significant growth potential in Canada and plans to derive most of its future revenue growth from there.

Management recently shut down its loss-making U.S. and Emma & Roe businesses, and the market reacted negatively, with the company's share price plummeting nearly 50% over the past year.

Management believes the market has overreacted and that Michael Hill is now substantially undervalued.

Your job is to complete a preliminary valuation of the business so that you can better advise management on their best options.

### TASK:

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Please complete the revenue/expense projections and Discounted Cash Flow (DCF) analysis for Michael Hill.

Note that large portions of this Excel file have been completed for you; for example, the Comparable Public Companies and Precedent Transactions are already in place.

Please use the following assumptions for the blank portions of the model:



## Revenue Assumptions:

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- **Australia, # of Retail Stores:** This will rise to 185 by FY25 and remain there until the end of the 10-year projection period.
- **New Zealand, # of Retail Stores:** This will rise to 54 by FY23 and remain there.

Sales per Store per Year in both these regions will decline in the first two years due to the company's restructuring efforts, but return to steady, modest growth after that. Follow the numbers already entered in Excel.

Management have outlined the following plans for the **Canada** segment:

- **Store Count:** Maximum of 100 stores; growth of 3 new stores per year.
- **Sales per Store Growth Rate:** 6.5% initially, declining by 0.5% per year until reaching 3.0%.

## Expense and Cash Flow Assumptions:

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Assume that EBIT margins for Australia rise to 15.5% by FY 25, after dipping slightly in the first two years, and that they rise to 22.5% for New Zealand by FY25, also after dipping for the first two years.

Margins in Canada are expected to increase by 0.5% per year until reaching 15.0% and stabilising there.

Use averages for the exchange rates and corporate overhead assumptions.

The cost of opening a new Michael Hill store will rise from \$575K AUD in FY19 to \$750K by FY27.

For the Maintenance CapEx per Store, follow the assumptions that have already been input into Excel, which assume a gradual increase over time.

Please use the following figures for the remaining assumptions:

- **Depreciation & Amortisation:** As a percentage of Revenue, this should remain 1.0% below CapEx as a percentage of Revenue.
- **Deferred Income Taxes:** 25.0% of Book Taxes falling to 10.0% by FY22.
- **Net Change in Working Capital:** 30.0% of the Change in Revenue initially, falling to 25.0% by FY22.



### Discount Rate Calculations:

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Use the comparable public companies and information on each company's capital structure to calculate the Weighted Average Cost of Capital (WACC).

Use the following assumptions, based on data for the Australian stock market and Michael Hill's historical performance:

- **Risk-Free Rate:** 2.10%
- **Equity Risk Premium:** 5.96%
- **Pre-Tax Cost of Debt:** 6.70%
- **Cost of Preferred Stock:** 10.00%

You may calculate WACC using several methods; it's up to you whether you weigh WACC based on the company's current capital structure, its "optimal" capital structure, or its current capital structure and historical Cost of Equity most heavily.

Use your judgment to determine the proper ranges for WACC in the sensitivity tables.

### Terminal Value and Final Valuation Assumptions:

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Calculate the Terminal Value via **both** the Multiples Method and Gordon Growth Method, and use the comparable public companies and the expected long-term GDP growth rate of 2.0% to inform your numbers.

Cross-check these assumptions by ensuring that the Implied Growth Rate and Implied Multiple are both reasonable.

The ranges for the sensitivities are up to you, but make sure you look at a wide variety of plausible outcomes.

For example, if the comparable public companies trade at multiples spanning a range of 3-4x, you should reflect that range in your table(s). It would **not** be reasonable to show a range of only 1-2x, nor would it be reasonable to show a range of 10x.

Link the output of the DCF to the rest of the valuation in the "ValSum" tab when you're done.

### CASE STUDY QUESTIONS:

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After you complete the model, please respond to the following questions:



**1) Are management correct that the market is significantly undervaluing Michael Hill right now? Why or why not?**

It appears that management are correct that the company is significantly undervalued currently, as the median implied share prices from all methodologies are well above \$0.68, with some, such as the DCF and Precedent Transactions, closer to \$2.00.

Furthermore, the 25<sup>th</sup> percentile to 75<sup>th</sup> percentile ranges of nearly all the methodologies are well above \$0.68 as well, with the Precedent Transactions and DCF closer to the \$1.50 – \$2.00 range.

However, we're not 100% certain that Michael Hill is undervalued by *as much as* the DCF seems to imply (~150%) because it is unclear how much of the company's Total Assets correspond to the Discontinued Operations from the U.S. business and Emma & Roe, or how much in additional expenses the company needs to complete this process.

Also, we have not examined other scenarios, such as slower growth in Canada, a prolonged drop in sales in ANZ, or an economic recession in these regions.

Taken together, all these factors mean that the company is still significantly undervalued, but perhaps more in the 30-50% range rather than the 100-150% range implied by the DCF.

**2) How would you advise the Michael Hill management team? Should they pursue a sale of the company right now, or is it more prudent to raise capital, make add-on acquisitions, or continue to grow organically?**

A sale does not make sense right now because the company is significantly undervalued, and prices for public companies are based on a modest premium (15-30%) to current share prices.

Add-on acquisitions do not make much sense currently because the company's Cash balance is low, and it should not issue Equity at such a low valuation, which means that the add-on acquisitions would have to be funded by Debt.

Whilst that is possible, as the company's leverage is very low currently (~0.5x), we think it makes more sense for the company to finish the U.S. and Emma & Roe exist, show the market that it has turned itself around, and then pursue these strategies.

So, organic growth is the best option for now, and when the company's share price has risen and stabilised in the future, management can consider more aggressive growth strategies and Debt-funded add-on acquisitions.