Supplementary methodology: ROACE vs WACC

This supplementary methodology provides details about how we assessed profitability within the retail grocery industry, focussing on our approach to estimating the WACC and ROACE.

Our analysis of ROACE vs WACC for our first annual grocery report uses the same core methodology as the Market Study. These are summarised below. The Market Study's detailed methodology can be found in Attachment B of the Market Study final report.[1]

ROACE

Treatment of property assets

Both the Market Study and this report include the value of land and buildings in our analysis of ROACE. For this report we have made some changes in how we estimate the value of changes in the value of land and buildings over time compared to how we did this in the Market Study. We made these changes to have a more intuitive and consistent approach, and note that we are unable to exactly replicate the Market Study approach as some RGRs were unable to provide equivalent information to what they provided in the Market Study.

ROACE estimates the returns RGRs earn from running a supermarket business relative to the amount of capital required to operate such a business. Supermarkets need land and buildings to operate, and these are part of its asset base. Holding long-lived assets like land and buildings also offers the business the potential for gains (and losses) in the value of those assets over time. Such holding gains and losses are part of the return earned by the business (net profit after tax) and they also affect the estimate of the amount of capital that is invested to operate the business (asset base).

Varying approaches were taken to estimate the amount of holding gains on supermarkets' property assets during the Market Study. For example, individualised uplifts based on estimates of market value increases were applied in respect of FSNI and FSSI, while no uplift was applied in respect of WWNZ's net profit after tax as they lease the majority of their properties.

For our 2019 to 2023 analysis, we have used a consistent approach and have applied the same proportionate increase in the value of RGR-owned land and buildings to both the net profit after tax and the asset base for all three RGRs. We have chosen a 2.0% uplift as this is the mid-point of the Reserve Bank's target range for inflation.[2]

1 Commerce Commission "Market study into the retail grocery sector – final report" (8 March 2022) https://comcom.govt.nz/__data/assets/pdf_file/0024/278403/Market-Study-into-the-retail-grocery-sector-Final-report-8-March-2022.pdf

2 Reserve Bank of New Zealand "Inflation" (accessed 16 August 2024) https://www.rbnz.govt.nz/monetary-policy/about-monetary-policy/inflation

WACC

The Commission estimates WACC across a range of industries and uses the same methodology when doing so. Our methodology specifies seven parameters, and values for all seven are required to estimate the WACC. The parameters are the risk-free rate, the debt premium, asset beta (and subsequently equity beta), tax-adjusted market risk premium (**TAMRP**), investor and corporate tax rates, and leverage.

For our 2019 to 2023 analysis, we have used the same estimate of the value of following four parameters as we used in the Market Study – asset beta, investor and corporate tax rates, and leverage. These are unchanged because we consider the value of these parameters is relatively stable over time and we have no reason to consider the estimated value of the parameter has material changed since the Market Study. We have updated our estimate for the other three parameters – risk-free rate, the debt premium, and TAMRP – for the reasons detailed below.

Risk free rate

The value of the risk-free rate can be volatile and in the period 2019 to 2023 it experienced material falls and increases. We therefore use an updated risk-free rate estimated over the period from 2019 to 2023 rather than rely on the 2015 to 2019 risk-free rate that was used in the Market Study. This is consistent with our approach in other industries where the risk-free rate is updated on an annual basis.

In-line with the Market Study we have used a risk-free rate with a term of 10 years. The average ten-year risk-free rate estimated during the period 2019 to 2023 was 2.53%.

Debt premium

Like the risk-free rate, the value of the debt premium changes frequently. We therefore use an updated estimate of debt premium for the period from 2019 to 2023 rather than rely on the estimate used in the Market Study. This is consistent with our approach in other industries where estimates of the debt premium are updated on an annual basis.

As we did in the Market Study, we have estimated the value of the debt premium for debt with a term of five-years using data on the observed yields of publicly traded New Zealand corporate bonds. For this report we use such data for the period from 2019 to 2023. The average such debt premium for the period 2019 to 2023 was estimated to be 1.46%.

TAMRP

The TAMRP is an estimate of the higher expected returns from holding a portfolio of risky assets when compared to the risk-free rate. As the TAMRP is a market-wide parameter, rather than sector-specific, estimates of the TAMRP made for the purposes of our other work can be used directly in our grocery work.

During the Market Study a TAMRP of 7.0% was used for our central WACC estimate and 7.5% was used for our higher WACC estimate. We used 7.5% as a conservative estimate in the Market Study as it was the most recent of TAMRP available at that time, as reported in our work in respect of Part 6 of the Telecommunications Act 2001.

Since that time, we have updated our estimate of the TAMRP to 7.0% and we have used that estimate for our regulatory work under Part 4 of the Commerce Act 1986 and for our recent Part 6 Telecommunications Act 2001 work.[3] We adopt that estimate in our analysis for this report too.

Excess profitability

In the Market Study our estimate of excess profit used, among other things, the average ROACE of the RGRs for the period 2015 to 2019. This approach ignores differences between RGR's ROACE averages and variations between years. This was considered appropriate in the Market Study for the period 2015 to 2019 as the estimates of ROACE were largely consistent between RGRs and between years.

However, for the period 2019 to 2023 there are differences in the estimates of ROACE between RGRs and between years. As such we consider that calculating excess profit using each RGRs' individual ROACE figure for each year within the period is more appropriate and have applied this approach to our 2019 to 2023 analysis accordingly.

[3] Commerce Commission "Amendment to input methodologies for Fibre ahead of the price-quality path for Chorus' second regulatory period (2025 – 2028): update to the tax-adjusted market risk premium" (29 May 2024). https://comcom.govt.nz/__data/assets/pdf_file/0024/353760/Fibre-Input-Methodologies-TAMRP-Final-decision2FReasons-paper-28-May-2024.pdf