



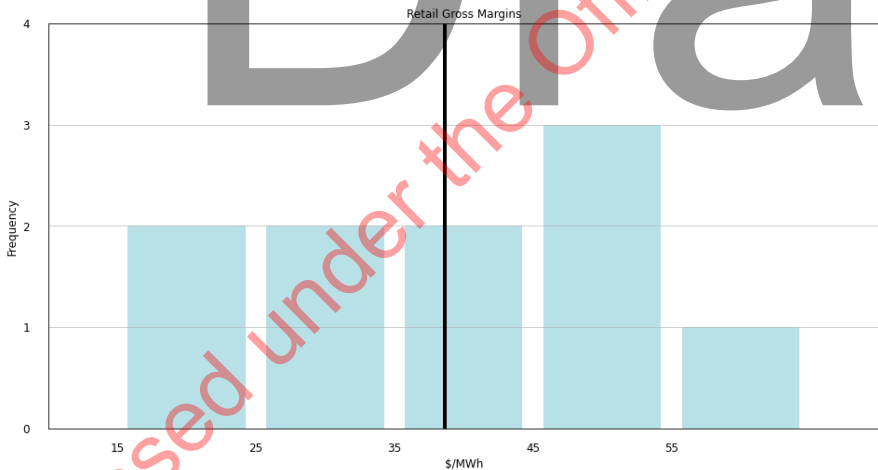
New Zealand’s electricity retail market: retail gross margins

New Zealand’s retail market is currently made up of 39 retailers, of which four (previously five) are large gentailers who each have between 16% and 26% of the market share. There has been concern that the large gentailers who both sell and buy electricity have an advantage over small and medium retailers and new retailers. Our analysis of 2022 retail gross margins found that the cost break-downs of gentailers and small and medium retailers were similar, suggesting a competitive market. However, high spot and future prices compared to previous years meant that new entrants to the retail market likely struggled to compete with incumbents in 2022.

**Commented [BL1]:** We can talk you through out tables on this - where we got to is talking separately about retail brands vs the business that owns them. Reason this is important is that several generation businesses own more than one retailer, and to us that's the key measure of market concentration - all of their brands, not just the "main" one. Seb can take you through the detail on this.

The Retail Gross Margins disclosures for 2022 have been published [will insert link here]. This disclosure data includes revenue and a breakdown of costs, reported in \$/MWh, for each retailer subject to disclosure. The retail gross margin represents the amount of revenue made by the retailer after they pay for electricity, metering, levies, and distribution costs, and therefore includes both the cost of service and any retail profits. Figure 1 shows the retail gross margin by frequency of retailers in each value range, with retailers spread between \$19.50/MWh to \$56.57/MWh, and a mean of \$38.63/MWh. There was no noticeable pattern in the size of margins between the large gentailers and the small to medium sized retailers, with both the largest and smallest retail gross margin reported by gentailers.

Figure 1: Frequency of retail gross margin in \$/MWh, including mean value



Retailer costs varied from \$226/MWh to \$281/MWh, which was predominantly made up of the cost of electricity, between \$92/MWh and \$111/MWh, and lines costs of between \$84/MWh and \$105/MWh. Lines costs are largely determined by the pricing plans of Transpower and electricity distribution businesses and so depend primarily on the type and location of customers. Metering costs were between \$9/MWh and \$15/MWh and levy costs were usually close to \$1.10/MWh.

The spot price of electricity depends on both the location of consumers and time of use. Residential consumers usually use more power during peak periods compared to commercial users, and electricity prices in the North Island are usually higher than in the South Island. Therefore, we expect retailers' cost of electricity to vary depending on their customer base.

A retailer can choose to buy electricity on the spot market, but they can also own generation, or agree in advance to pay a set price for electricity, either through a power purchasing agreement or by purchasing hedges on the Australian Securities Exchange (ASX) or through an over-the-counter agreement usually with an electricity generator. Gentailers reported their costs of electricity to be between \$99/MWh and \$111/MWh, while retailers without a generation portfolio reported electricity costs between \$92/MWh and \$111/MWh indicating costs of generation were similar for gentailers and others who do not own generation.

Figure 2 shows the 2022 monthly and daily spot prices, with the mean spot price of \$141/MWh at Otahuhu and \$126/MWh at Benmore. This is significantly higher than the retailers' reported cost of electricity of between \$92/MWh and \$111/MWh, indicating that retailers used other approaches, such as hedging, to reduce the risk of high spot prices.

Figure 2: 2022 Monthly and daily average spot prices at Otahuhu and Benmore

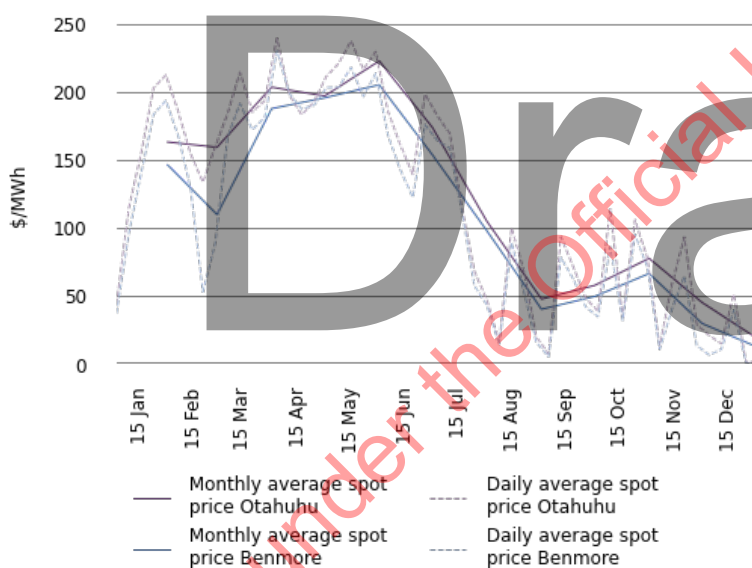


Figure 3 shows the forward prices for the 2022 quarters at Otahuhu and Benmore between 2019 and 2022. Forward prices indicate expected spot prices in the future, factoring in risks of high prices due to shortages. A purchaser can lock-in this expected price by buying the futures contract. During 2019 and 2020 prices varied between \$58/MWh and \$115/MWh at Otahuhu and between \$33/MWh and \$105/MWh at Benmore. In early 2021, future prices for 2022 rose dramatically to above \$130/MWh and eventually reached a high of \$265/MWh at Otahuhu for the June quarter in March 2022.

The analysis shows that most retailers' electricity costs in 2022 were close to the long-term average of the ASX price. This indicates there is no significant retail profit advantage for companies which

also own generation assets. The analysis suggests most retailers without a generation portfolio used a long-term hedging strategy, or some other strategy that mimicked what is possible with a long-term strategy.

Figure 3a: Quarterly ASX prices for 2022 at Otahuhu

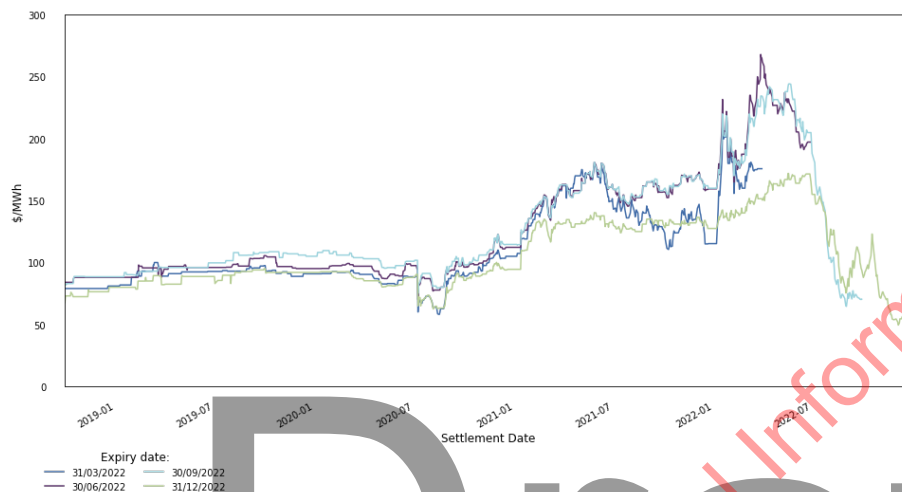
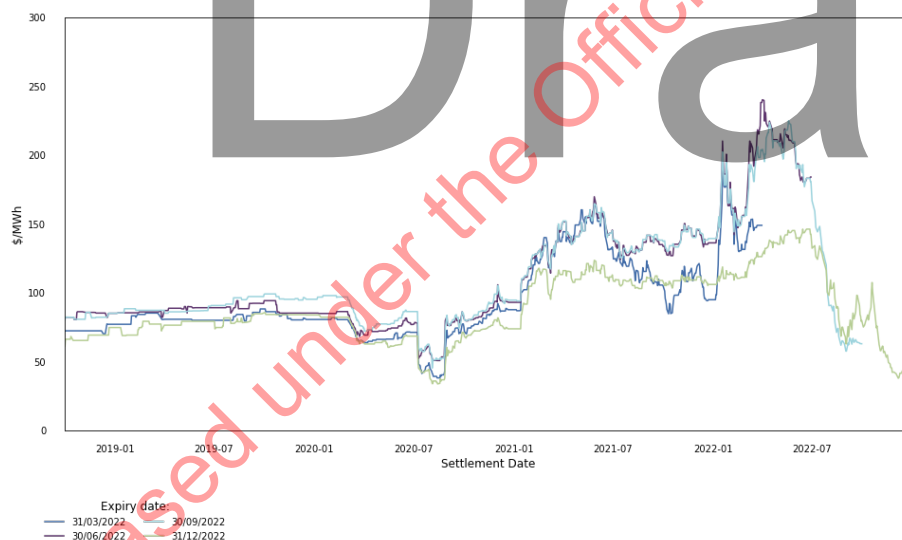


Figure 4b: Quarterly ASX prices for 2022 at Benmore



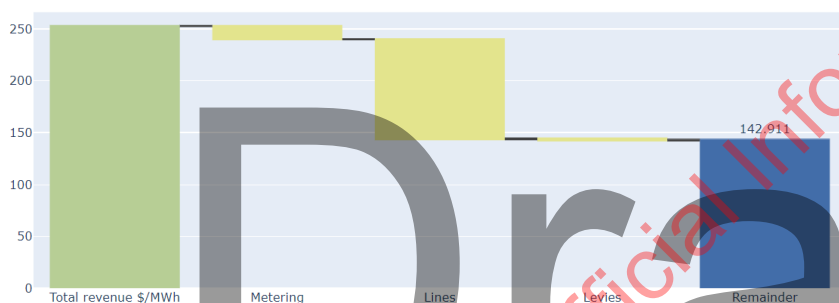
A new entrant to the retail market is expected to face similar metering, distribution, and levy costs to existing retailers, at least for a given customer, and they would need to price competitively to gain new customers. Figure 4 uses the mean revenue and metering, distribution, and levy costs for incumbent retailers to estimate plausible revenue and costs for a theoretical new entrant, with the

remainder of \$143/MWh estimating the highest they could pay for electricity and cost of service without making a loss. A new entrant entering the retail market in 2021 faced hedge prices for 2022 of between \$130/MWh and \$180/MWh for Otahuhu, with prices about \$20/MWh lower at Benmore. Therefore, the new entrant could not buy at the price incumbent retailers reported and would have had difficulty buying hedges at a price low enough to maintain a sufficient retail margin to cover cost of service.

In the first half of 2022 the hedge prices for the March, June and September 2022 quarters were usually above \$180/MWh, and spot prices were above \$180/MWh between March and June, meaning a new entrant in early 2022 would likely have made a loss during its first year unless it had built forward cover before entering the market.

Figure 5: Estimated revenue and costs of a theoretical new entrant, and estimated remainder available for energy costs

New Entrant



A new entrant entering the market in 2023 would face higher prices for ASX hedges for 2023 and 2024 compared to incumbent retailers who were in the market prior to 2022. However, future prices for 2023 and 2024 have recently decreased, especially for the June and September quarters. When future prices drop below the long-term average price paid by incumbent retailers, new entrants have an advantage against incumbent retailers as they are can take advantage of lower electricity prices to offer better deals to consumers.

Hence, the timing of entry into the retail market is crucial to the success of a new entrant, given current forward market price volatility. A retailer who entered the market and bought hedges during 2019 or 2020 would probably have had a cost advantage over incumbents due to the low forward prices at the time. The opposite is true for a retailer entering in 2022.

Overall, we found the retail gross margin for 2022 ranged between \$19.50/MWh to \$56.57/MWh. There was no noticeable different in the margins between gentailers and retailers without generation portfolios, with energy costs ranging between \$92/MWh and \$111/MWh, close to the long-term average of ASX prices. However, a new entrant entering the market in 2021 faced much higher forward prices and would likely have struggled to remain competitive against incumbent retailers while maintaining a positive retail margin.

**Commented [BL2]:** Provided they were hedging; if they're buying on spot then wouldn't help