

Electricity Sector

COVID-19's Modest Electric Shock

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The Electricity Sector is resilient and we expect it to weather the COVID-19 storm well. Whilst electricity demand during the lockdown is between -10% and -15% lower, we expect demand to rebound once the lockdown is over. In addition, we are not anticipating any reduction in dividends as the earnings impact should be relatively minor and sector balance sheets are strong. NZAS closure risks are overdone, in our view, and the sector is offering good value even if NZAS was to close.

Our key messages:

- Temporary electricity demand declines from the COVID-19, whilst significant, are unlikely to materially impact earnings
- Electricity sector balance sheets are solid and not at risk of breaching banking covenants
- We expect all of the five generator/retailers to be able to maintain/modestly grow their FY20 and FY21 dividend
- The experience of the GFC bodes well for electricity stock performance during any post-lockdown economic downturn. Earnings are unlikely to be materially impacted and electricity sector dividends will look increasingly attractive relative to alternatives
- We maintain our view that NZAS closure risk is low, although we would not be surprised if there is a delay in the final decision
- The sell down in electricity stocks is more than the expected value drop if NZAS was to close suddenly on 1 April 2020

Electricity demand dips as country moves into lockdown

The initial electricity demand reduction from the lockdown is between -10% and -15%, although we expect that will increase to between -15% and -20% as businesses further ramp down in the coming days. Once the lockdown is over, we expect electricity demand to return to normal, even though an economic downturn is likely. We note that electricity demand during the GFC increased.

No change to earnings forecasts at this stage

We have not altered any earnings forecasts at this stage as the earnings downside should be relatively minor as the profit margin on reduced volumes is not much above the cost of running marginal thermal generation. We estimate the sector impact is less than \$5m/month of the lockdown and the economic downturn post-lockdown is also likely to have a minor impact on the electricity sector.

Sector sell-off overdone, even after taking into account NZAS closure risk

The big four generator/retailers have sold off between -23% and -29% since 21 February. The underlying value hit for the electricity stocks from COVID-19 is immaterial. We believe much of the sell down is due to renewed fears that NZAS will close in 2021. We do not believe NZAS will close, but if it was to shut suddenly on 1 April 2021, we estimate the value impact is no more than -10% for any electricity stock, and is, therefore, fully factored into the current share prices. We are positive on the sector overall and believe it has been oversold due to NZAS/COVID-19 concerns. The best value is in CEN, GNE, TLT and TPW (OUTPERFORM ratings). However, MCY and MEL are also offering attractive entry points for companies with the best generation assets in the country.

Figure 1. Summary valuation metrics

Company	Price	Target Price	Target Return	Rating	EV/EBITDA	Adjusted PE	FY20	
							Gross Yield	EBITDAF (NZ\$m)
Contact Energy (CEN)	\$5.47	\$8.00	53%	OUTPERFORM	10.9	16.9	8.8%	441
Genesis Energy (GNE)	\$2.32	\$3.15	43%	OUTPERFORM	9.9	14.6	10.0%	366
Mercury (MCY)	\$4.25	\$4.60	12%	NEUTRAL	13.8	24.5	5.2%	501
Meridian Energy (MEL)	\$3.99	\$4.40	16%	NEUTRAL	13.7	20.4	6.8%	864
Tilt Renewables (TLT)	\$2.90	\$3.70	28%	OUTPERFORM	13.1	16.0	0.0%	135
Trustpower (TPW)	\$5.95	\$7.70	35%	OUTPERFORM	13.3	22.1	7.9%	187

Source: IRESS, Forsyth Barr analysis

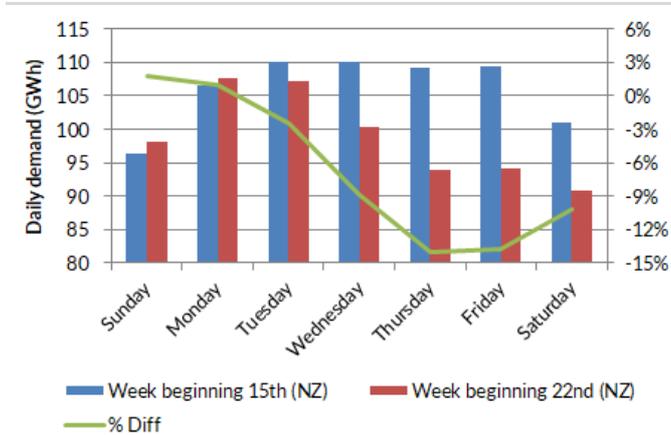
COVID-19 provides short-term demand shock

Lockdown impacts – the immediate effects

Electricity demand and wholesale electricity prices dip

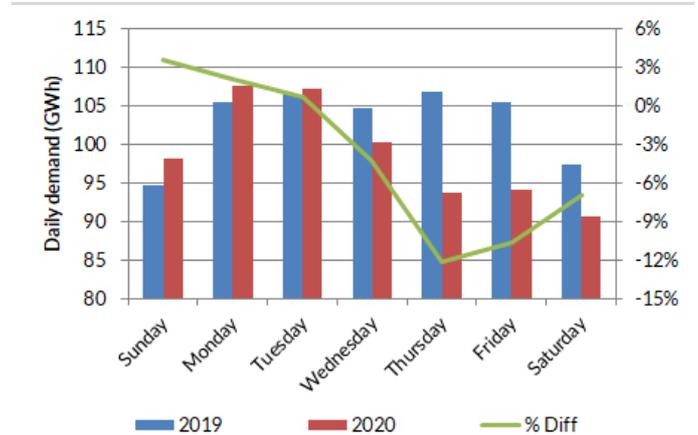
After three days of lockdown, electricity demand appears to be down between -10% and -15%. However, it is early days and a cold snap over the lower half of the country will be increasing home heating demand. In addition, we understand that some non-essential high electricity use industry (NZ Steel and the pulp & paper sector) have yet to fully shutdown. The demand reduction could, therefore, increase to between -15% and -20%. April is one of the lower demand months, hence, the impact is likely to be between -1.0% and -1.5% on an annual basis.

Figure 2. Electricity demand vs. last week



Source: Electricity Authority, Forsyth Barr analysis

Figure 3. Electricity demand vs. last year

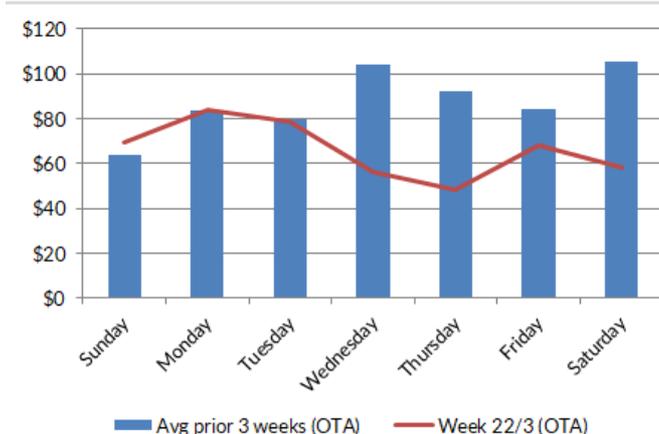


Source: Electricity Authority, Forsyth Barr analysis

Other points to note are:

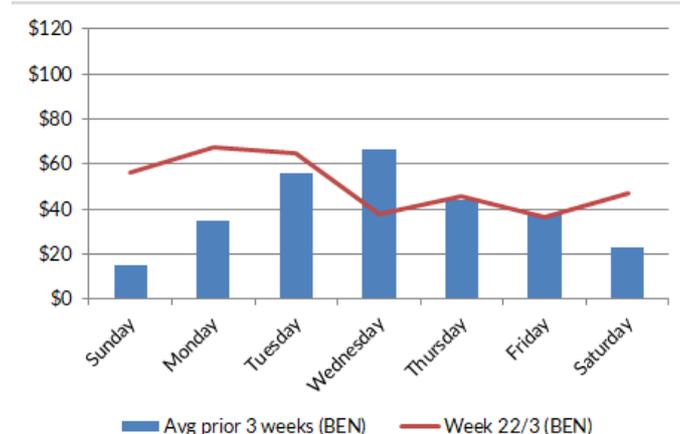
- Electricity demand vs. last year is not down as much indicating continued underlying demand growth
- North Island demand is down more than South Island as NZAS is deemed an essential service (in reality it's still operating because you cannot simply shut-off the aluminium smelter safely and the damage to the pot-lines would be significant)
- Electricity demand on Thursday and Friday (the first two days of shutdown) is not dissimilar to demand on a Sunday
- Whilst the electricity demand data of residential vs. commercial is not available yet, we expect higher margin residential electricity use will increase, whilst lower margin commercial demand will see the biggest decline
- Whilst it is too early to draw any conclusions, wholesale electricity prices did not fall to extremely low levels despite the demand drop being greater than NZAS closing. Prices in Auckland (Otahuhu) were down -25% (-\$20/MWh) Wednesday to Saturday vs. the prior three days. It is harder to read much into the Benmore prices given the HVDC work that is being undertaken at present

Figure 4. Otahuhu wholesale electricity prices



Source: Forsyth Barr analysis

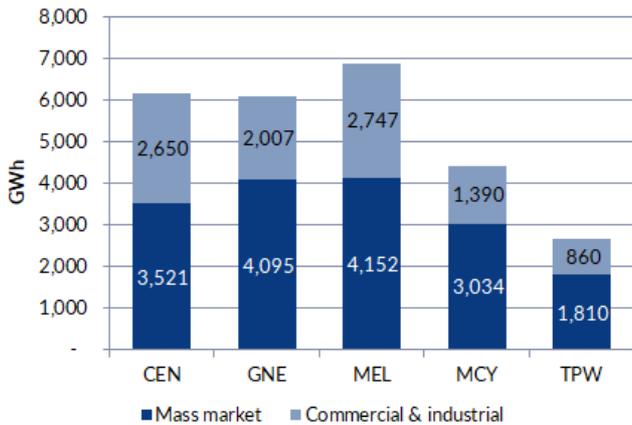
Figure 5. Benmore wholesale electricity prices



Source: Forsyth Barr analysis

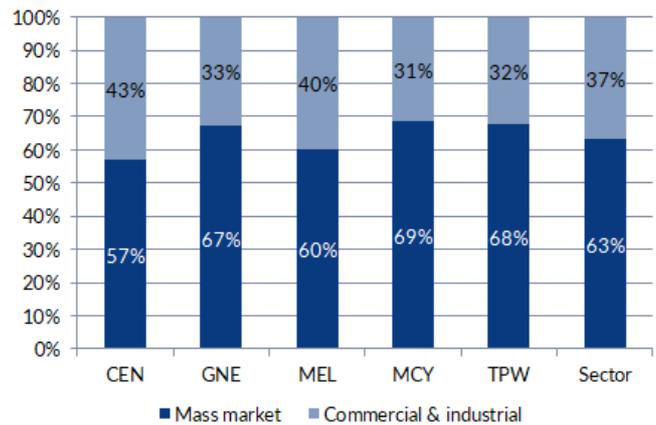
At this stage it is difficult to ascertain the level of short-term earnings impact. Most electricity is sold at a fixed price, hence, the demand fall is more important than the wholesale electricity price fall. However, with commercial and industrial margins (C&I) typically lower than mass market (MM) margins, the sector earnings impact is likely to be modest (depending on how long the lockdown lasts). We estimate the sector EBITDA impact/month is less than \$5m/month of lockdown. All of the big five generator/retailers have a similar mix of MM sales to C&I sales (although we note that definitions differ between companies. In addition, most companies include small/medium enterprises within MM sales, and these businesses have been hard hit by the lockdown).

Figure 6. MM and C&I volumes – 12 mths to 31 Dec 2019



Source: Company reports, Forsyth Barr analysis

Figure 7. Sales mix (excludes NZAS and spot sales)



Source: Company reports, Forsyth Barr analysis

Wind farm developments go on hold

Other than the drop in electricity demand, the other main impact has been MCY and TLT temporarily stopping their respective wind farm developments (Turitea and Waipipi). The value effect from the delay is minor. In an example of the difference between the New Zealand and Australian governments approach to COVID-19, TLT has indicated it is able to continue construction of its Dundonnell wind farm in Victoria. It has, however, experienced some minor supply chain related disruptions out of China.

MCY has also brought forward the start date of new CEO Vince Hawkworth, who will be commencing his role today, 30 March (instead of 28 April).

What will happen post-lockdown? – GFC comparisons

Post-lockdown contains many uncertainties. In particular, what is the economic impact of effectively shutting down the country for a month, possibly longer. Given there is no precedent, it is very hard to predict. However, the experience through the Global Financial Crisis (GFC) provides some indicators, although we suspect the economic impact will be greater this time around.

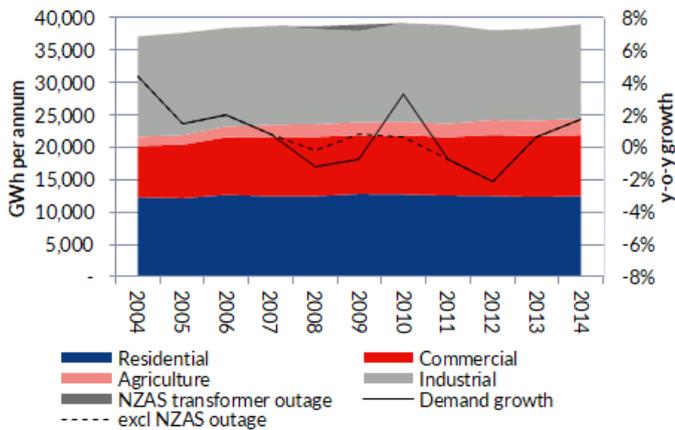
Demand has remained strong in previous financial crises

Electricity demand was largely unchanged during the GFC, with yoy demand growth (excluding Tiwai) of +0.8%, +0.7% and +0.5% in 2008, 2009 and 2010 respectively. Residential and agricultural electricity demand grew during this period, more than offsetting modest commercial and industrial volume declines. Similar to the GFC we expect to see any decline in demand coming from industrial and commercial usage.

Sector EBITDAF did not decrease during the GFC

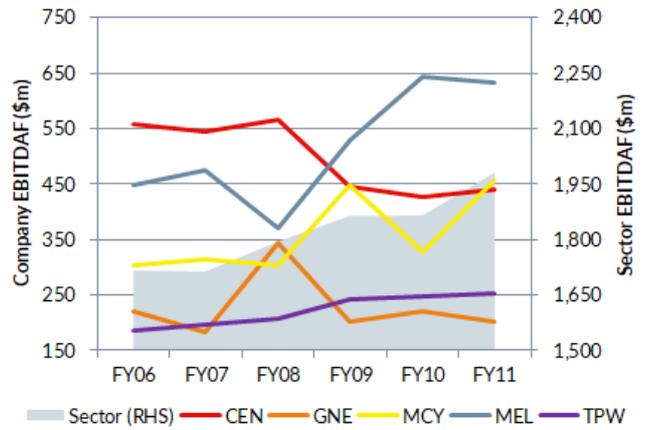
Through the GFC New Zealand electricity sector operating earnings (EBITDAF) continued to grow and was up +4.7% and +3.9% in FY08 and FY09 respectively, before a flat FY10 outcome. In FY11 sector EBITDAF grew by +6.2% on the pcp, as the economy recovered from the recession. Much of the increase in earnings in 2008 and 2009 was due to an increase in electricity prices following the 2008 dry winter. Whilst we do not expect a material impact on earnings from a COVID-19 economic downturn, we do not expect a strong earnings increase either as wholesale electricity prices are unlikely to firm from current levels.

Figure 8. Energy demand breakdown



Source: MBIE, Forsyth Barr analysis

Figure 9. Sector NZ EBITDAF

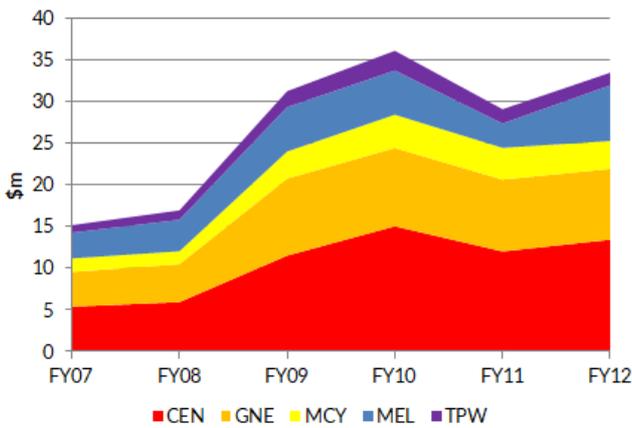


Source: Company reports, Forsyth Barr analysis

Bad debts doubled during post-GFC, but not enough to impact earnings

Prior to the GFC, bad debts written-off totalled \$17m in FY08, which more than doubled to \$36m by FY10. FY19 sector write-offs totalled \$20m, which is similar to pre-GFC levels. We suspect write-offs will be greater following the COVID-19 economic impact, although most of the impact is likely to hit FY21 earnings and should largely be absorbed within the business.

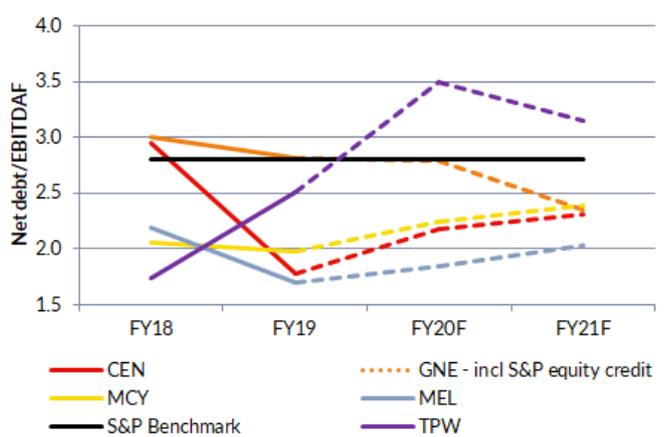
Figure 10. Electricity sector bad debts written off



Source: Company reports, Forsyth Barr analysis

Note: MEL did not disclose bad debt write-offs, so we have used its 91 day+ balance as a proxy

Figure 11. Sector net debt / EBITDAF



Source: Company reports, Forsyth Barr analysis

Debt is not an issue for the electricity stocks

We are comfortable with the debt levels of all the electricity stocks. The S&P benchmark of 2.8x net debt / EBITDAF is the key metric required to maintain their respective credit ratings (short-term moves above 2.8x is not an issue and TPW is unrated). Only GNE and TPW are close to or above that level. We expect GNE to move well below 2.8x in FY21 with EBITDAF increasing following the roll-over of expensive take-or-pay gas contracts. TPW is the only other business above 2.8x following its large capital return to shareholders in FY19 and a difficult year in terms of earnings in FY20.

All of the generator/retailers have retail bonds in the market (and all except TPW have USPPs). The retail bond covenants are all related to balance sheet metrics (as opposed to earnings), which we do not expect to change materially. We do not anticipate any debt market issues for the generator/retailers. USPP covenants are not disclosed.

Guided dividends should be maintained

Given the strength of the sector balance sheets and relatively minor expected impact on earnings, at this point, we do not foresee the electricity companies having to step away from their dividend guidance/policies. All of the electricity companies should be able to maintain/modestly grow their dividends in FY20 and FY21 and we do not expect the dividend cuts that other sectors have experienced.

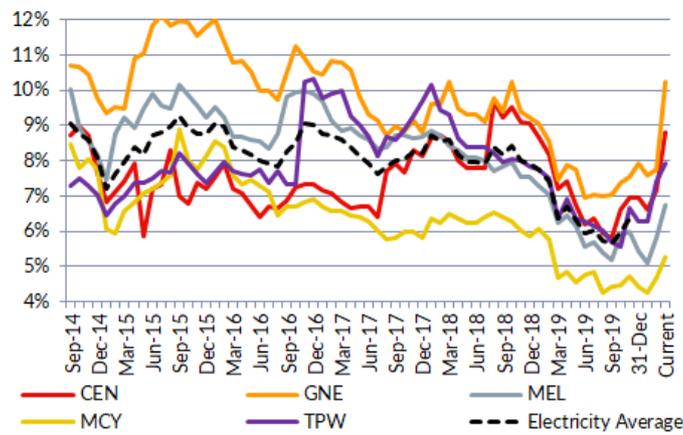
When this is all over we expect quality yield stocks to again be in favour

One of the key share price drivers (and some would argue the only share price driver) in recent years has been interest rates. The electricity sector provides investors with a quality dividend. That yield has increased as share prices have peeled off over the past month. For most of the electricity stocks, the gross dividend yields are at their highest level in 15 months (and for GNE it's three years). The average sector gross dividend yield is currently 7.8%, the highest since December 2018.

More importantly, relative to the 10-year swap rate, the average gross dividend yield is at a record high. The spread is currently 6.8%, vs. the typical range of 4.5% to 5.5% (although we acknowledge there is huge volatility in interest rate markets at this point in time).

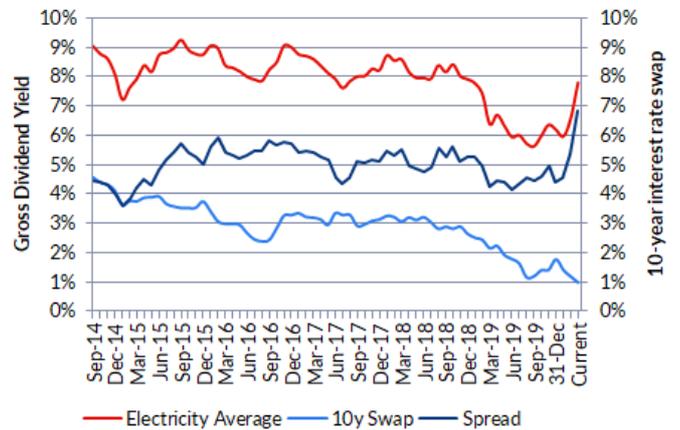
When COVID-19 fears fade into memory, we expect yield to once again be a key focus for investors. Interest rates are likely to be very low for a long time, making high quality, high dividend, stocks such as the electricity sector look increasingly attractive. If the 10-year swap rate stays at ~1.0% and the average sector gross dividend yield spread trends back to the long-term average of ~5.0%, that equates to a +30% increase in current share prices.

Figure 12. Electricity gross dividend yields



Source: Bloomberg, Forsyth Barr analysis

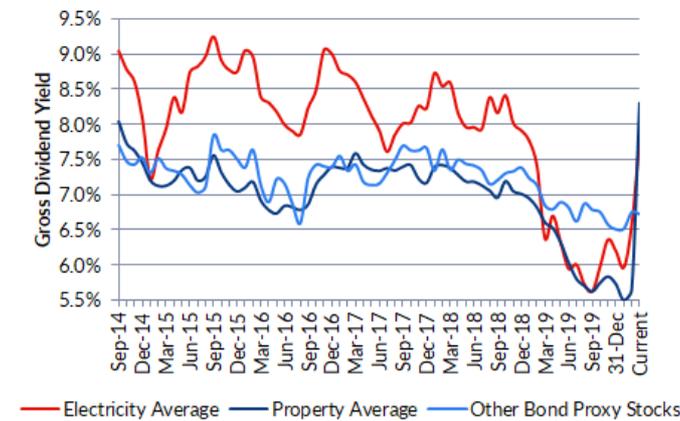
Figure 13. Sector gross dividend yield vs. 10-yr swap rate



Source: Bloomberg, Forsyth Barr analysis

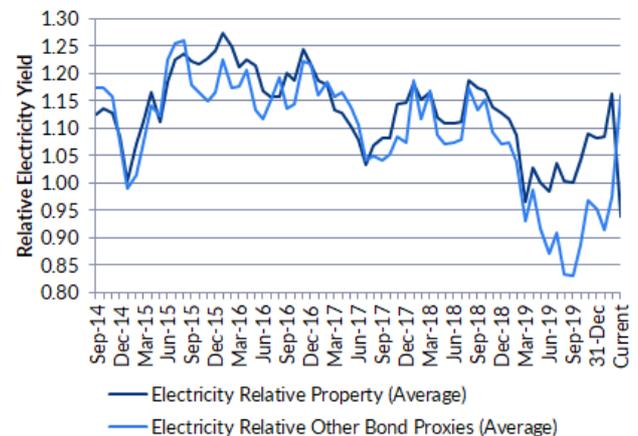
Relative to other high quality yield stocks, the electricity sector has performed well vs. property, but not as well as other bond proxies (Chorus, SkyCity, Spark, Vector). The outperformance relative to property was expected, as some of the property stocks are heavily exposed to an economic downturn (and the retail sector in particular). Relative to other bond proxies, the electricity stocks have underperformed CNU, SPK and VCT, as they are largely shielded from any economic downturn (and the telco stocks will likely see an increase in demand for their services). Nevertheless, the level of electricity underperformance vs. CNU, SPK and VCT is greater than would otherwise be expected, largely due to NZAS closure risk fears emerging.

Figure 14. Average sector gross dividend yields



Source: Bloomberg, Forsyth Barr analysis
Other bond proxies are: CNU, SKC, SPK, VCT

Figure 15. Electricity sector yield vs. property and bond proxies



Source: Bloomberg, Forsyth Barr analysis

RIO's NZAS decision imminent (in theory)

We still believe that Rio Tinto is unlikely to close NZAS. However, over the past month, it appears that the electricity sector share market performance has been impacted more by closure risk fears than COVID-19 impacts.

Decision day looms, but delay is entirely possible

When it announced its strategic review, RIO indicated that it wanted to make a decision by the end of Q1 2020, i.e. tomorrow, Tuesday 31 March (although a decision could be made after market close). Whilst it is still possible a decision is made and announced, a delay is a strong possibility. We understand that there is a RIO board meeting in early April.

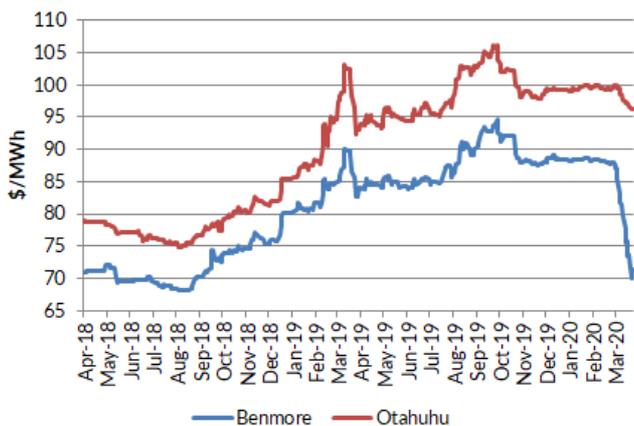
In addition, RIO could delay its decision as part of its negotiating tactics. With the country in lockdown, and the economy already facing a massive economic shock, the politicians will likely be wary about exacerbating the problem in Southland.

Don't believe the closure rumours

There have been persistent rumours that RIO has already made a decision that it will be closing NZAS. Over the past few weeks, the long-dated Benmore futures prices have fallen dramatically and are back down to levels pre-the Pohokura gas outage in September 2018. In contrast, Otahuhu futures have only dipped slightly, a clear signal that some in the futures market are picking closure (the Benmore price implies a ~35% chance of closure). In addition, the Benmore futures imply NZAS will switch the lights off on 1 April 2021.

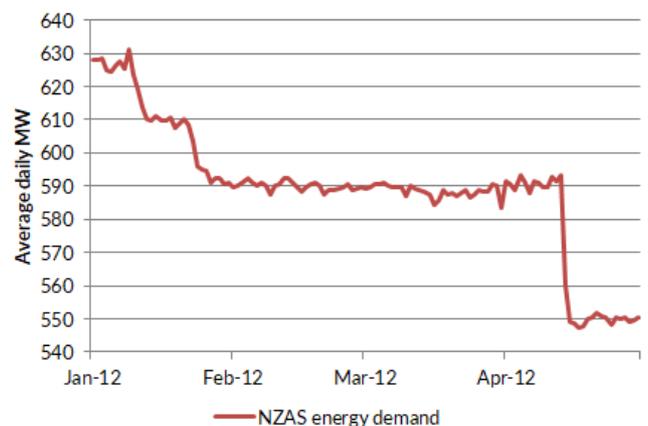
Our discussions with electricity sector participants do not support the sudden closure theory, let alone any closure. If NZAS was to close it is more likely to do so gradually, than a sudden closure as implied by the futures prices. The ramp-down of potline 4 in 2012 was undertaken over several months – and the load reduction back then only equated to ~12% of NZAS's electricity demand. In addition, we understand that RIO is still engaging with MEL and we question why RIO would be engaging with MEL in the way it is if a closure decision had already been made.

Figure 16. Long-dated future electricity prices



Source: Electricity Authority, Forsyth Barr analysis

Figure 17. Potline 4 electricity demand ramp-down



Source: Electricity Authority, Forsyth Barr analysis

A gradual ramp-down of NZAS would be helpful to MEL and CEN in particular, as it will allow Transpower to complete transmission upgrade work, minimising the risk of spilling water at their respective Manapouri and Clutha River power stations. It will also enable a more orderly closure of North Island thermal plant, ensuring the market remains largely in balance.

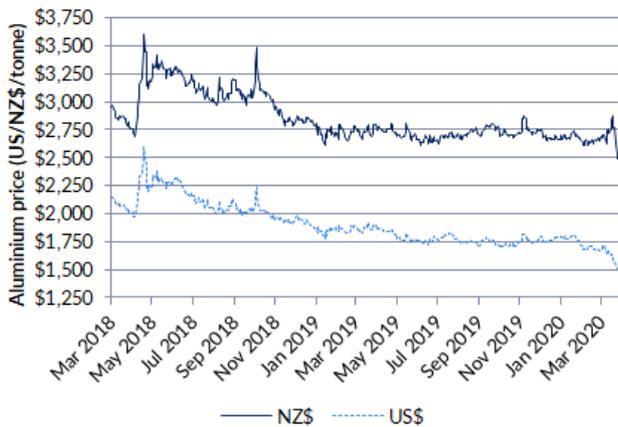
Our analysis is that a sudden closure of NZAS will result in less than a -10% hit to our DCF valuation of all of the generator/retailers. A gradual closure of NZAS reduces the valuation impact to less than -5%. This compares to share price reductions of ~-23% to -29% for the big four generator/retailers since 21 February.

NZAS profitability dip from COVID-19 only hits in the past week

Up until late last week, aluminium prices in NZD terms have remained remarkably stable with the fall in the NZDUSD shielding NZAS from the USD fall in aluminium prices.

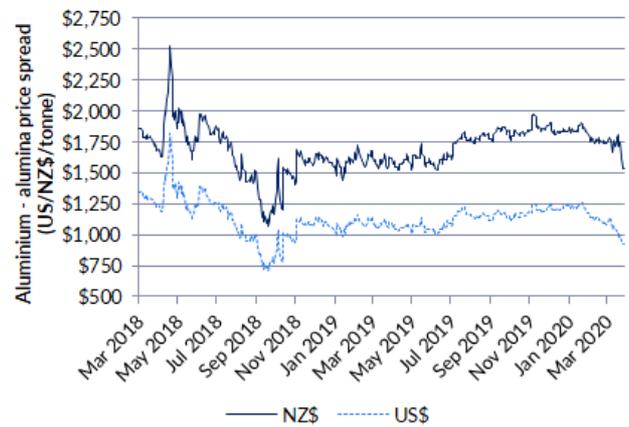
- Aluminium prices have averaged NZ\$2,686/tonne in March 2020 so far, +1.4% higher than the February 2020 average. However, the spot price is currently NZ\$2,495/tonne, the lowest since February 2017
- Similarly the spread between aluminium and alumina was relatively stable until late last week. It is currently ~NZ\$1,530/tonne (~US\$925/tonne), down -16% from an average NZ\$1,830/tonne in the six months to the end of February 2020
- We estimate that the current NZAS profitability (EBITDA less capex) has become slightly negative in the past week, having held up well in early March

Figure 18. Aluminium prices



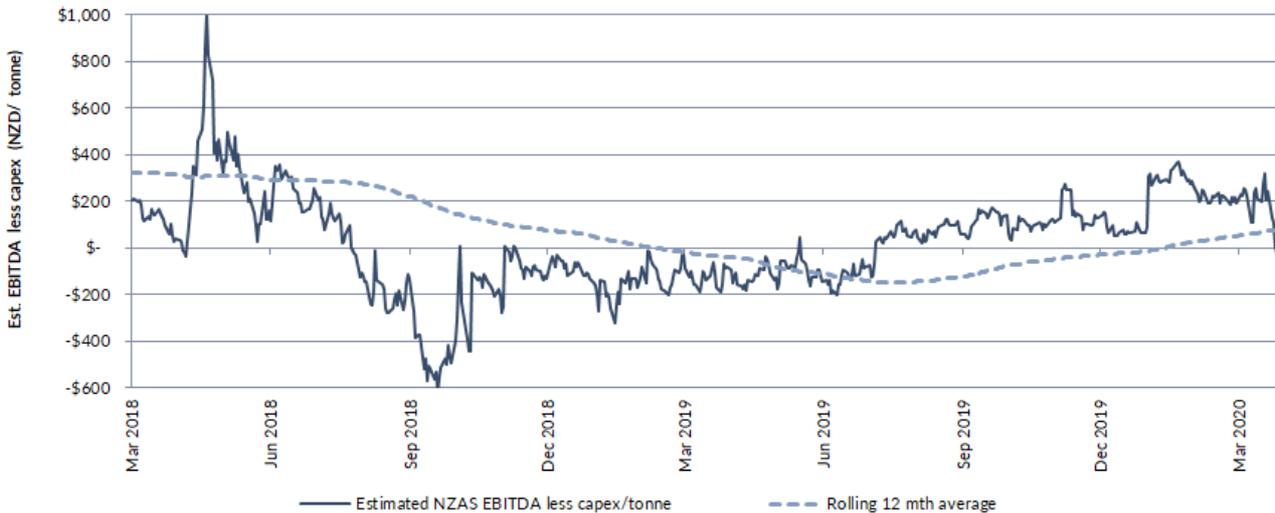
Source: IRESS, Bloomberg, Forsyth Barr analysis

Figure 19. Aluminium - Alumina price spread



Source: IRESS, Bloomberg, Forsyth Barr analysis

Figure 20. Estimated EBITDA less capex profit/tonne



Source: IRESS, Bloomberg, NZAS, Forsyth Barr analysis

Note: we have assumed a lower electricity price from 1 Jan 2020 of

In our view, the most likely impact of COVID-19 on the NZAS decision is a delay. Closing NZAS is a permanent long-term decision, that removes any option value. It would, therefore, be risky for RIO to make a decision influenced heavily by short-term volatility. However, given the short-term uncertainty, delaying a decision (and putting more pressure on the politicians) is understandable.

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