



PARAGON AUSTRALIAN LONG SHORT FUND // November 2018

PERFORMANCE SUMMARY *(after fees)*

	1 month	3 months	6 months	Financial YTD	1 year	2 year p.a.	3 year p.a.	5 year p.a.	Net Return p.a.	Total Net Return
Paragon Aust. Long Short Fund	+0.9%	-10.5%	-24.0%	-20.2%	-31.3%	-2.4%	+0.4%	+6.5%	+8.8%	+62.2%
ASX All Ordinaries Accum. Index	-1.8%	-9.5%	-4.1%	-6.9%	-1.1%	+6.5%	+7.7%	+6.0%	+6.5%	+43.5%
ASX Small Ords. Accum. Index	0.0%	-10.3%	-8.0%	-8.9%	-1.6%	+8.9%	+10.4%	+7.1%	+4.6%	+29.5%

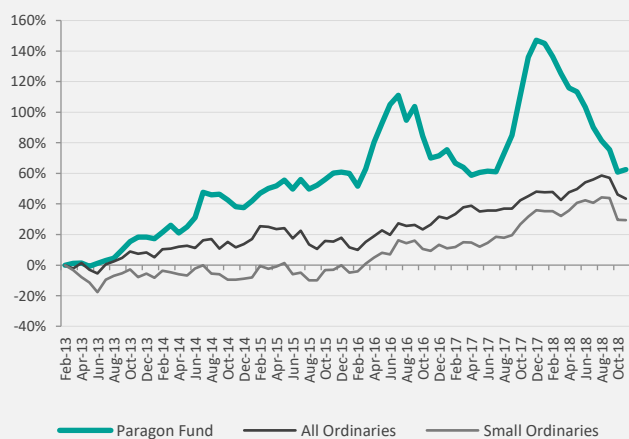
RISK METRICS

Sharpe Ratio	0.4
Sortino Ratio	0.8
Correlation	0.4
% Positive Months	59%
Up/Down Capture	74%/36%

UNIT PRICE & FUM

NAV	\$1.5269
Entry Price	\$1.5292
Exit Price	\$1.5246
Fund Size	\$44.5m
APIR Code	PGF0001AU

HISTORICAL PERFORMANCE *(after fees)*



FUND STRATEGY

Established in March 2013 as an Australian equities long/short fund that is fundamentally driven with a concentrated portfolio of high conviction stocks, managed by a dedicated investment team and offering transparency to investors. Paragon's proprietary research and extensive investment process which includes active portfolio management, is overlaid with a strong risk management function and a focus on capital preservation. The objective of the Fund is to return in excess of 10% p.a. after fees over a 3-5yr investment horizon.

OVERVIEW AND POSITIONING

The Fund returned +0.9% after fees for the month of November against a backdrop of weaker Australian share market indices, down -0.4% to -6.6%. Positive contributors for the month were longs in Kidman and Adriatic and shorts in Westgold and CSR. These were in part offset by declines in Dacian Gold and Beach Energy. November saw various positive Electric Vehicle (EV) sector updates and Adriatic's exciting discovery-delineation continue to surprise to the upside – both discussed overleaf.

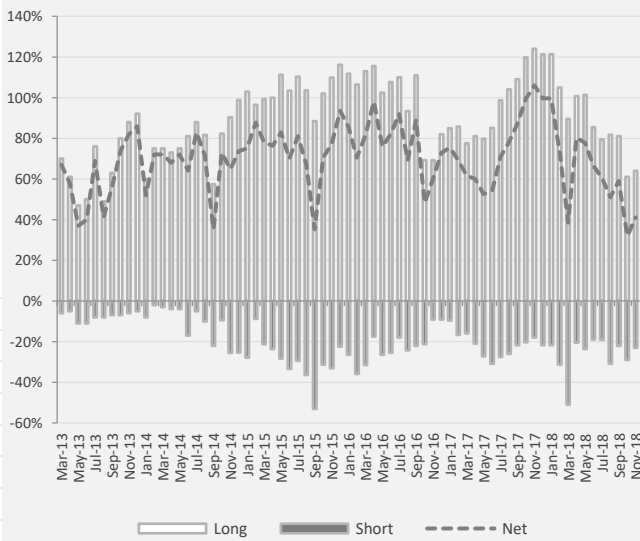
FUND POSITIONING

Number of Longs	19
Number of Shorts	16
Net exposure	41%
Gross exposure	88%
Index futures	0%
Cash	59%

FUND FACTS

Structure	Unit trust
Domicile	Australia
Applications & Redemptions	Daily
Minimum investment	\$25,000
Min. addition/redemptions	\$5,000/\$10,000
Administrator	Link Fund Solutions
Prime Broker/Custodian	UBS

HISTORICAL EXPOSURE



MONTHLY PERFORMANCE BY CALENDAR YEAR

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
2013			1.1%	0.3%	-2.2%	1.8%	1.8%	1.6%	5.3%	4.9%	2.8%	0.0%	18.7%
2014	-1.1%	3.8%	3.6%	-3.9%	3.2%	4.9%	12.5%	-1.1%	0.3%	-2.5%	-3.1%	-0.5%	15.9%
2015	3.2%	3.6%	2.1%	1.1%	2.4%	-3.8%	4.3%	-4.2%	1.6%	2.5%	2.6%	0.3%	16.8%
2016	-0.5%	-5.2%	7.4%	10.8%	7.0%	6.3%	2.9%	-7.8%	4.3%	-9.0%	-7.9%	0.8%	6.8%
2017	2.3%	-5.0%	-1.6%	-3.2%	1.3%	0.4%	-0.2%	7.3%	7.0%	14.0%	11.9%	4.7%	44.1%
2018	-1.3%	-3.0%	-4.7%	-4.2%	-1.2%	-4.7%	-6.5%	-4.6%	-3.2%	-8.4%	+0.9%		-34.3%

Performance results are presented net of all transaction costs, investment management and performance fees incurred by the Fund. Monthly performance figures are calculated based on the lead series, using a daily unit pricing methodology based on historical data.



EV thematic update – sentiment starting to turn positive

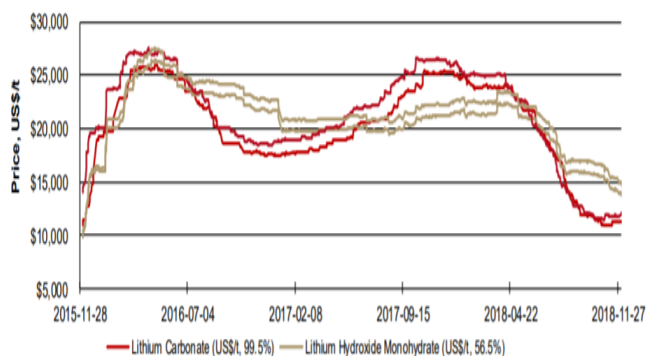
This year’s negative sentiment shift caused by correcting Chinese Lithium spot prices and oversupply anxiety has started to turn positive on various catalysts. These include Chinese Lithium spot prices bottoming, Lithium supply challenges globally and diminishing fears of a flood of new supply from South America, Lithium demand growth continuing to surprise to the upside, ongoing key large-scale EV supply chain developments and record China EV sales, each discussed below.

We also provide an update on our key Lithium exposures and compare Lithium’s evolution with other historical high-growth metals.

Lithium prices bottoming, likely to remain strong to incentivise new supply

After several months of correcting, both Chinese spot Lithium Carbonate (LC) and Lithium Hydroxide (LiOH) prices have been bottoming. See below:

Chart 1: China spot LC & China spot LiOH prices



Source: Asian Metals, Cormarck

Chinese spot prices, adversely influencing sentiment short-term, came off this year due to:

- Fears of China’s revised EV subsidy regime and its potential to impact demand. As we have explained previously, the new subsidy regime is simply pushing EV manufacturers to accelerate a move to better battery chemistries (high nickel cathodes which require LiOH) for greater energy density and longer car driving range. Short-term this has caused some de-stocking and re-tooling of production circuits in the supply chain; however, these better batteries require even more Lithium which in time will only improve Lithium’s fundamentals.
- Oversupply anxiety and its bear case promoted heavily by a couple of investment banks. This in fact has not eventuated and instead 3Q18 confirmed a raft of production downgrades globally and a significant reduction in Chilean brine-based expansion plans – as we anticipated and discussed in [January 2018](#).
- Increased (seasonal) supply of off-specification and lower quality (and certainly not EV battery-grade quality) LC from Chinese brine producers, which was sold into the Chinese spot market at lower prices compounding the nervousness in the Lithium sector this year.

The material sell-off in the sector this year has been frustrating as falling Chinese spot LC & LiOH prices only represent 5-10% of the overall market, and further, LC & LiOH are far from homogeneous – with large pricing disparity for specification and quality of both Industrial vs EV Battery grades. Contract LC & LiOH prices, the bulk of market volume, have remained strong and well in excess of Chinese spot prices, particularly for high-quality EV battery-grades which will dominate the strong growth in demand.

Ongoing Lithium supply-side challenges, delays and halting expansion plans

On the supply side, production performances continue to disappoint in both existing and new projects, and ‘major expansion plan rhetoric’ gets replaced with reality as follows:

- SQM’s CY18 production guidance downgrade and tempered volume outlook from its Chilean brine-based operation; Albemarle’s weak 3Q18 production quarter and halting engineering work on its Chilean brine-based expansion due to technical and permitting complications.
- Chinese producer delays, namely Tianqi and Ganfeng, both well behind on their refinery expansions.
- Neometals, Galaxy’s and Orocobre’s Q3 production misses, and Tawana’s Q4 production downgrade on permitting delays; Altura Mining’s, Pilbara’s Pilgangoora and Mineral Resources Wodgina hard-rock lithium project delays.

Lithium projects routinely over-promise and under-deliver, particularly from the majors who ‘spook the sector’ in order to maintain market strength and share. Historically, forecasts of new medium-term supply typically based on ‘promotional/aggressive’ company guidance, have been **70-100% overstated**. Based on our proprietary Lithium Industry modelling, we expect tight Lithium markets for the next 2 years, followed by surpluses from 2021-2023, and then major deficits following this. Even the surplus expected from 2021-23 may not eventuate, on any one or combination of the following – project permitting, final investment decision, funding, construction and commissioning, technology risk, ongoing low upstream and/or refinery utilisations and ongoing lithium demand growth surprises to the upside – which have been typical across the sector for the last decade.

Lithium demand growth continues to surprise to the upside

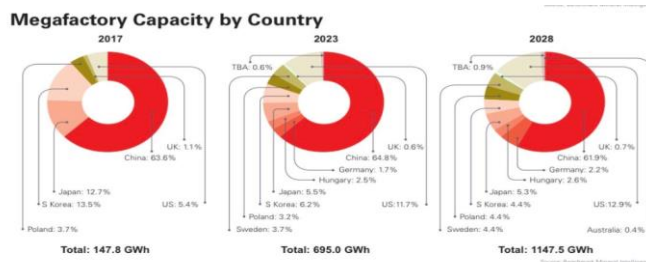
Unlike supply, demand continues to surprise to the upside, with Lithium demand now growing at 25% p.a. Consensus forecasts 5 years ago were less than half this actual growth rate (see [August 2013](#)) and earlier this year was 20% p.a. as discussed in [June 2018](#).

SQM, the most conservative of the Lithium majors, increased their view of lithium demand growth in their 3Q18 result released last month to surpassing 25% in 2018. Like the other majors, SQM continue to confirm being fully ‘sold out’ with no inventories to speak of and also re-iterated that demand continues to outpace supply.

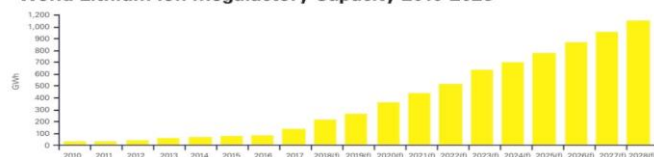
Rapid EV (Lithium-ion) battery megafactory capacity growth continues

Investment in EV battery megafactories continues with major EV companies investing across the supply chain, supporting mass-market EV penetration. There are now over 60 megafactories under development.

Chart 2: EV battery megafactories - capacity by country and cumulative growth



World Lithium Ion Megafactory Capacity 2010-2028



Source: DB, CAAMS



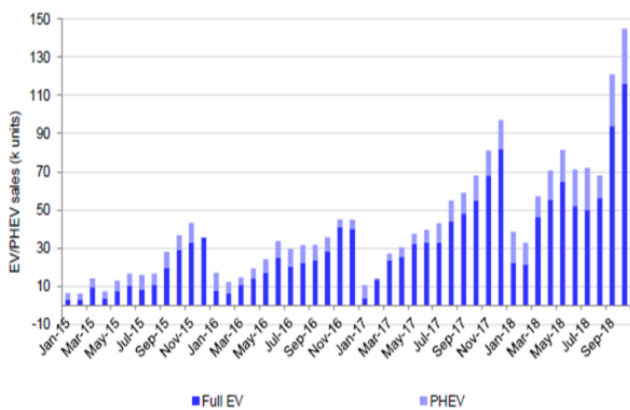
In 2017, 23% of lithium demand was for LiOH – less than half the 60% of demand for LC. We expect substantial growth in LiOH over LC, hence SQM’s pursuit and focus on Kidman’s Mt Holland LiOH project.

Similarly, Albemarle recently paid US\$1.15b for a 50% share of Mineral Resources’ Wodgina integrated LiOH project following an extensive and competitive process. Albemarle’s purchase price implies LiOH prices of ~US\$13,000/t for more than a decade in order to produce economic internal rates of return (IRR of ~13%). Along with this move (and unsurprising to us due to issues we had raised in the past), Albemarle dropped its Chilean LC expansion plans. We always thought that Wodgina was a big asset that could make or break the lithium market depending on who’s hands it’s in. Therefore, Albemarle’s effective control of Wodgina maintains the industry’s high concentration and prevents the creation of a new competitor. This is bullish for the sector as Albemarle will be better able to set long term LiOH pricing. We doubt Albemarle’s full purchase price for Wodgina represents a top of the market acquisition, as the same was said about Chinese Lithium major Tianqi & Albemarle’s purchase of the world’s largest hard-rock mine, Greenbushes, in 2013 for US\$950m. Albemarle was also thought to have ‘overpaid’ in its US\$6b acquisition of then Lithium-major Rockwood in mid-2014. Both purchases have since proven to be very astute buying and timing as Lithium prices soared making these acquisitions if anything, cheap! Also, Tianqi has just completed its 24% acquisition of SQM from Nutrien for US\$4.1b or US\$65/sh, at ~50% premium to SQM’s current share price.

China is 2/3 of global EV sales and continues to surprise to the upside

It is increasingly obvious that China is leading the charge for dominance in the global EV battery arms race, dominating the supply chain as well as EV sales. Chinese YoY EV sales growth has been strong and they are likely be early in hitting their 2m EV sales target - defying so many doubters previously. This is despite falling sales of new internal combustion cars – both in China and globally.

Chart 3: Chinese Full EV and Plug-in Hybrid EV sales – exhibiting strong growth YoY



Source: DB, CAAMS

Meanwhile, VW last month upgraded its EV-focused capex budget to ~44b Euros - to be spent on new facilities, EV, autonomous driving and mobility services between 2019 and 2023. This represents one-third of VW’s expected total spending to 2023 and legitimises its massive EV roll out plans. Also, GM announced plans to double its investment in EV and to discontinue the Volt, a plug-in hybrid, and focus on full EV (which use more Lithium).

Kidman Resources – our key Lithium exposure

Lithium and Cobalt resource companies in our view are still the best way to play the EV supply chain build out. They are preferred over battery materials, battery makers and EV manufacturers. Upstream minerals suppliers are likely to enjoy resilient commodity prices and margins, versus downstream players with excessive competition and capacity and lower barriers to entry.

Kidman’s recent pre-feasibility study demonstrated excellent project economics, in-line with our modelling. Total production costs for (EV battery-grade) LiOH will be ~US\$5.5k/t, at the bottom end (first quartile) of the global LiOH cost curve and offering strong margins versus both current spot and contract LiOH prices.

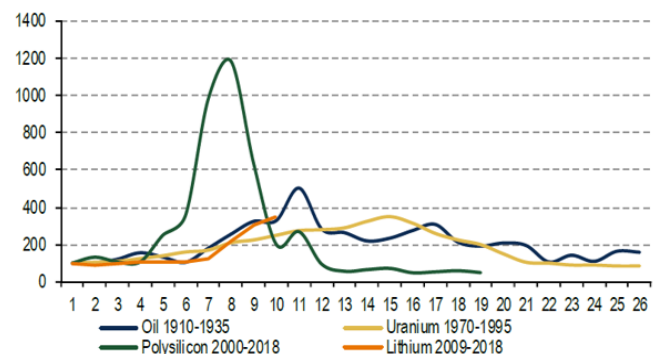
Albemarle’s US\$1.15b purchase price for a 50% share of Wodgina Integrated Lithium project makes Kidman (A\$535m/US\$390m market cap for its 50% interest in its Mt Holland Integrated Lithium project JV with SQM) look very cheap. We note that Albemarle will still need to contribute to the refinery (~US\$300m for its 50% share of 50ktpa LiOH base case capex), implying a proforma purchase price/investment of ~US\$1.5b for a likely second quartile LiOH cash cost curve project. That’s more than twice Kidman’s proforma fully funded enterprise value, and Mt Holland boasts a higher-margin integrated project, as its upstream project has lower strip ratio’s and its refinery (being based in Kwinana instead of a remote, non-downstream friendly Pilbara district) will mean lower reagents, chemicals, labour and energy costs. Kidman’s IRR is materially higher than Albemarle’s Wodgina investment. Once Kidman’s opportunistic JV asset claim is cleared (discussed in [September 2018](#)) and funding is confirmed (both expected near term), Kidman’s share price should double from current levels.

Our stock picks are attractively priced - both absolute and relative. So many other Lithium stocks are discounting unrealistically low LC and/or LiOH prices and are well placed to mean revert. Share prices of some of our key longs at their recent lows were discounting Lithium prices of <US\$7000/t, offering asymmetric risk-reward to the upside. Marginal cash cost support and new lithium supply incentive pricing are well in excess of this (we estimate >US\$10,000/t). Further, the global Lithium sector is trading at an enterprise value of ~US\$34b (SQM and Albemarle adjusted for Lithium only operations) versus 2025F Lithium market of ~US\$10-12b, implying the sector as a whole is trading at ~3.1x. This is certainly not expensive and if anything, good value for such a high growth opportunity. We used the recent share price weakness to add to both our Kidman and Orocobre positions.

Lithium’s move vs other metals evolutions

Looking out to 2025, Lithium demand growth is expected to be ~4x 2018 levels. As highlighted previously, it has been ~100 years since an industry has grown close to this rate (Oil and Gas in the early 1900’s) over a similar time period.

Chart 4: Indexed commodity prices during demand boom periods (starting year = 100)



Source: EIA, Nuclear Eng. Institute, Bloomberg, Benchmark Minerals, BAML

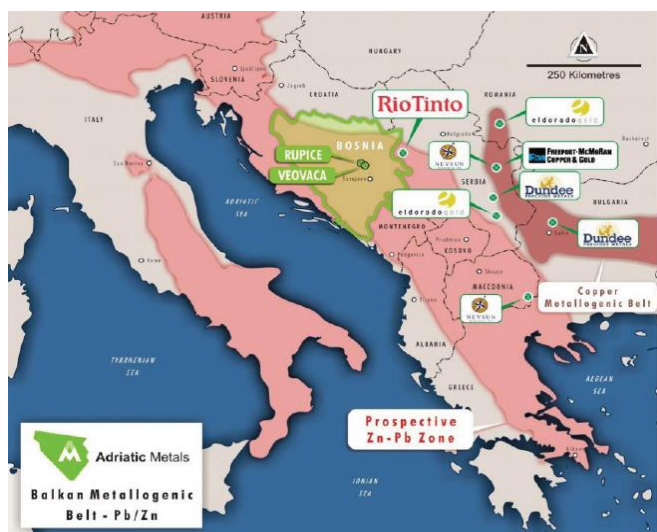
Lithium is likely to have over another decade of high-growth, like Oil and Gas (charted above) which also experienced bouts of volatility during its secular long-term bull market. Whilst the performance drawdowns in our Lithium stocks have hurt this year, the Fund has made strong returns from these stocks since inception. We remain confident and excited by the future growth opportunities Lithium and the Electrical Vehicle theme will deliver to our investors.



Adriatic Metals’ Zinc discovery goes from solid to exciting

Adriatic has made one of the best Zinc-strong polymetallic discoveries in some time, at Rupice within its 100% owned Vares Project, situated in Bosnia. This growing and very high-grade Rupice discovery resides within a well-endowed base metals belt which extends through to neighbouring Serbia where Nevsun and Rio Tinto boast world-class deposits. Adriatic rates as one of the best IPO and resources stock performers in 2018, trading near all-time highs in a year that has been particularly challenging for small-caps resources and Zinc equities down ~50% globally.

Chart 5: Adriatic’s project location



Source: Adriatic Metals

For those not familiar with Bosnia, property rights and rule of law are both sound and the country is stable and pro-mining. Adriatic has secured 100% ownership of its project tenements, and has excellent project access and cheap sources of (hydro) power, water and labour. Rupice is a company-making project. It will boast sector-low all-in cash costs, attractive capital intensity and strong economics – and profitable under any resource market environment given its very high-margin orebody.

Given Rupice is still in its discovery-delineation phase, we have internally estimated its Rupice orebody and likely development parameters. We conservatively model Rupice already having delineated a mineable orebody of >6mt @ >12% Zinc equivalent. (It could easily already be 50% bigger than that). Rupice’s orebody is still open to the North and South-East and Adriatic is currently stepping out in both directions, with excellent continuity recently proven in its South East extensions. We estimate that every 75m step out of continuity down-plunge to North adds ~1mt of ore, and its highly likely to extend in this direction given coincident ground geochemistry and electromagnetics.

Whilst still early days, we expect mineability and metallurgy to be favourable. Rupice’s resource hangs together well. Its largely a homogenous, mineable orebody, initially likely to start as an open-pit before being mined as an underground orebody. Whilst geotechnical and metallurgical works need to be completed, historical work at its local Veovoca orebody (<20kms away) demonstrated sound Zinc recoveries and concentrate grades; and we note that Rupice’s ore is coarser (better again).

Under a development scenario, we assume a capex maximum of ~US\$150m for a 1.5mtpa throughput operation (benchmarked against similar operations). Rupice could produce ~108ktpa Zinc contained at sector low costs given all the by-product (polymetallic) credits and its favourable orebody attributes. This could see Adriatic generating cashflows of ~\$240m p.a. at >5yr mine life, implying ~1yr payback on its capex. Given cashflows are 2+ yrs away, we ascribe a conservative base-case multiple of 2x implying an enterprise value (EV) of ~A\$475m. If adding 1-2mt at Rupice in exploration upside (highly likely), we’d then ascribe a high-case multiple of 3x, for a target EV of \$720m. Assuming 2/3 of its capex is equity funded at \$1/sh, Adriatic would then have a proforma (fully funded and fully diluted) share base of ~300m. We expect Adriatic to de-risk towards our high-case scenario in the short-term, where our price target becomes \$2.40/sh (EV of \$720m / 300m proforma shares) vs its current share price of \$0.65/sh. Since Adriatic’s \$0.20/sh IPO, we have added to our position as Adriatic continues to de-risk from our base to high investment case.

Zinc industry fundamentals are strong – with solid zinc spot prices of ~US1.23/lb despite the weak macro environment. Zinc inventories are rapidly declining due to ongoing industry deficits - expected for the next 2 yrs+. Chart 6 below illustrates the price risk to the upside, see 2006 when Zinc inventories fell to critical levels.

Chart 6: Zinc spot prices vs inventories



Source: Bloomberg, Paragon

Nearby Nevsun has recently been acquired by Zinjin of China (trumping Lundin Mining’s initial hostile takeover offer) in September 2018 for C\$1.4b, principally for its Serbian polymetallic asset. Another recent transaction includes the Sasa mine in Macedonia acquired by Central Asia Metals for US\$403m in November 2017, which is smaller and lower margin than Adriatic’s Rupice discovery. Sandfire, a mid-cap base metals resources company listed on the ASX is a significant shareholder in Adriatic and is unlikely to be the only potential acquirer.

The directors and management of Adriatic are doing a great job and importantly are well aligned (holding ~30% interest) and working in the best interests of all shareholders to maximise full value. We continue to be long Adriatic and look forward to updating investors with the stock’s progress.

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