

To: Investor Partners of Castlereagh Equity Pty Ltd

From: Peter Phan

Date: 31 October 2021

Re: Monthly Update

	CE	CE ex-fees	XAOA	CE ex fees vs XAOA	XAO	CE vs XAO	CE Net Asset Value
1/11/13 to 31/10/21	204%	181%	94%	87%	41%	163%	228 cents*
1/11/13 to 31/1/15	6.2%	6.2%	7.7%	-1.5%	2.4%	3.8%	106.2 cents
1/2/15 to 29/1/16	19.4%	16.4%	-4.7%	21.1%	-9.2%	28.6%	126.8 cents
1/2/16 to 31/1/17	19.7%	16.3%	17%	-0.7%	12.5%	7.2%	151.8 cents
1/2/17 to 31/1/18	9%	8.3%	13%	-4.7%	8.3%	0.7%	146 cents
1/2/18 to 31/1/19	0%	0%	0.6%	-0.6%	-3.4%	3.4%	139 cents
1/2/19 to 31/01/20	65%	51.7%	25%	26.7%	20.3%	44.7%	229 cents
1/2/20 to 29/1/21	20%	16.5%	-0.7%	17.2%	-3.8%	23.8%	253 cents
1/2/21 to 31/10/21	1.3%	1.3%	14.5%	-13.2%	11%	-9.7%	228 cents

To aid in understanding the tables above:

1. CE commenced on 1 November 2013 with shares issued at \$1 per share, backed by \$1 of cash per share.
2. The first row of the table above provides a summary of CE's performance since its commencement on 1 November 2013 until the date of this memorandum. It also compares CE's performance with the benchmark All Ordinaries index (XAO) and the All Ordinaries Total Return Index (XAOA) over the same period.
3. The second row of the table provides a summary of CE's performance for its first reporting period (15 months period from 1 November 2013 to 31 January 2015).
4. The third row of the table (and subsequent rows) provides a summary of CE's performance for its reporting period (12 months period from 1 February to 31 January).
5. The last row of the table provides a summary of CE's performance for its current reporting period (period commencing 1 February 2021 to the date of this memorandum).
6. *CE NAV is after payment of dividend and director fees in calendar month February of each year. These payments "reset" the NAV as follows:
 - (a) 1.52 to 1.34 in Feb 2017,
 - (b) 1.46 to 1.39 in Feb 2018,
 - (c) 1.39 to 1.39 in Feb 2019.
 - (d) 2.29 to 2.10 in Feb 2020.

(e) 2.53 to 2.25 in Feb 2021.

The XAO started at 5420 on 1 November 2013 and ended at 7639 on 31 October 2021. In percentage terms, the XAO gained 41% for the 96 months period since the start of the CE fund.

The XAOA started at 44054.2 on 1 November 2013 and ended at 85629 on 30 September 2021. In percentage terms, the XAOA gained 94% for the 96 months period since the start of the CE fund.

CE's performance over the same 96 months period is 204%.

For the month of October 2021, the XAO was unchanged and the XAOA was unchanged. CE dropped 1.7% for the month.

The cash component of the CE fund is 42%.

Commentary

Nothing much of significance occurred in October. Over the last 9 months, the CE portfolio has been flat as I have kept a large cash balance on the sidelines. Valuations in the US biotech space continue to be challenging, so I have not deployed any significant amount of capital. The Biotech ETF Index continues to drop and has lost nearly 40% since the start of the year. My various small forays into new ideas in the US have all dropped in tandem, offset somewhat by performance in our Australian holdings.

I have also been making progress in the drug discovery space. The main issue being faced in this area is essentially a search problem. Over 90% to 95% of drugs being developed and tested ultimately fail. Apart from being a testament to our collective lack of knowledge in biology, these failures come at a huge cost. Current estimates of the total costs of bringing a drug successfully to market ranges from US\$1 billion to US\$2.5 billion. The subgroup of cancer/oncology drugs are much more expensive. The average time required to bring a drug from discovery to market averages between 10-14 years.

Overall, across the entire industry, estimates of returns on every dollar of R & D spent have declined steadily over the last 10 years from 10% in 2010 to a measly 1.8% in 2019. 2020 saw a slight rise to 2.5%, but this is still rather poor. It is a significant problem that needs to be urgently addressed, especially in the context of a market worth some US\$1.5 trillion, and growing at above global growth rates.

I have now identified a group of 5 companies that are well placed to address the drug discovery problem. Further work is still required to gain deeper insights, but I expect that over the next month or two, I will be allocating a portion of the portfolio to a basket of 4 of these companies (the fifth company is not listed yet). I will tell you more about them in future memorandums.

Thank you for your trust and confidence in us.

Regards
Peter Phan
Director, Castlereagh Equity Pty Ltd

