CERNO CAPITAL

TM CERNO *Global Leaders*

UCITS Global Equity Portfolio (Class A)

Q4-2022

Fund Data

NAV/Share (Class A Acc)	£14.60
Fund Size (£mn)	130
Currency Share Class	GBP (Base)
Investment Management Charge	0.65%
Ongoing Charges Figure	0.84%
Dealing Frequency	Daily
Legal Structure	OEIC (UCITS)
Number of Holdings	27
Active Share	95%
Lead Manager	James Spence
Inception Date Fund	2017
Inception Date Strategy	2014

Investment Objectives

TM Cerno Global Leaders invests in global companies with sustainable competitive advantages delivering above average returns. Its target is to achieve long term growth in value. The fund will hold no more than 30 securities, equally weighted, selected according to a distinct investment thesis that accents industry structure, the sustenance of return on capital and secular growth. The fund does not invest in banks, commodity, fossil fuel or tobacco companies. The portfolio is fully invested at all times.

Portfolio Review

In this report, we make comment on the return for the fourth quarter and the year as a whole, we reflect on the factors behind the negative return from the portfolio this year and the outlook for 2023.

James Spence

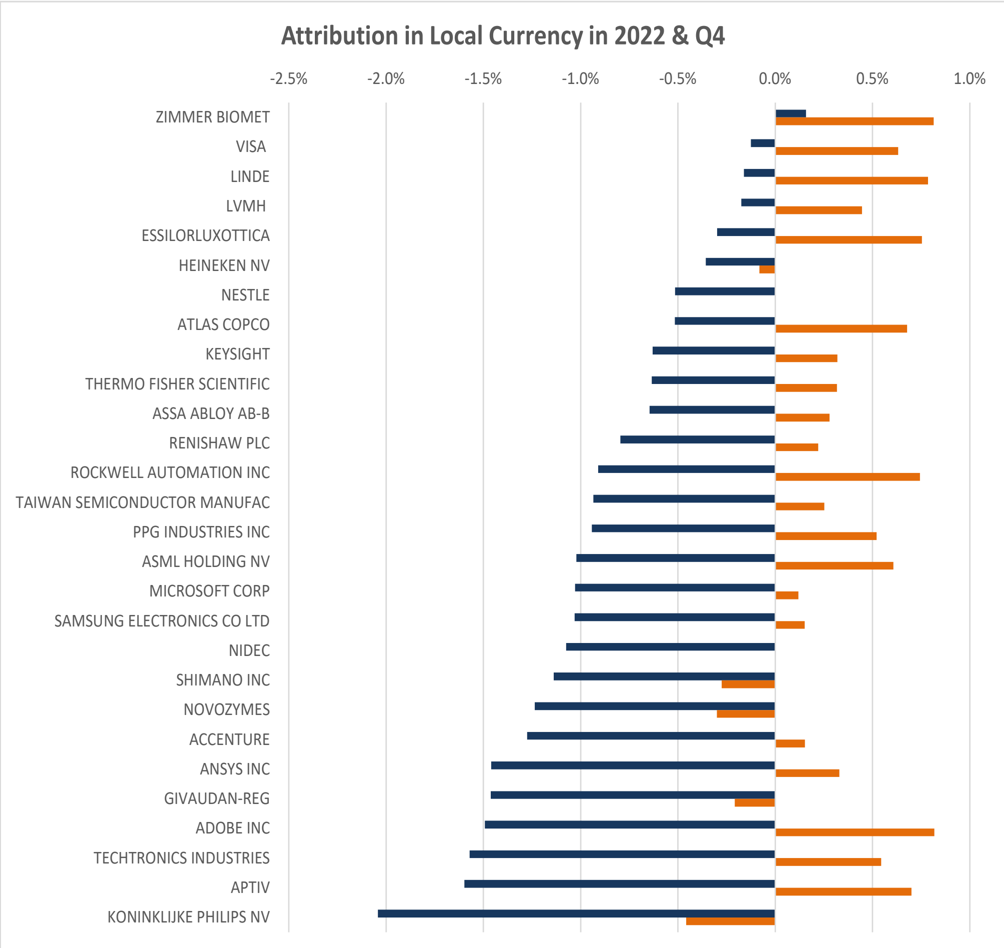
4Q and returns for the year

The portfolio returned +4.6% in the third quarter of the year. Currency movements were significant in suppressing the overall return to GBP class investors as GBP strengthened by 8.2% vs USD and 9.2% versus the euro.

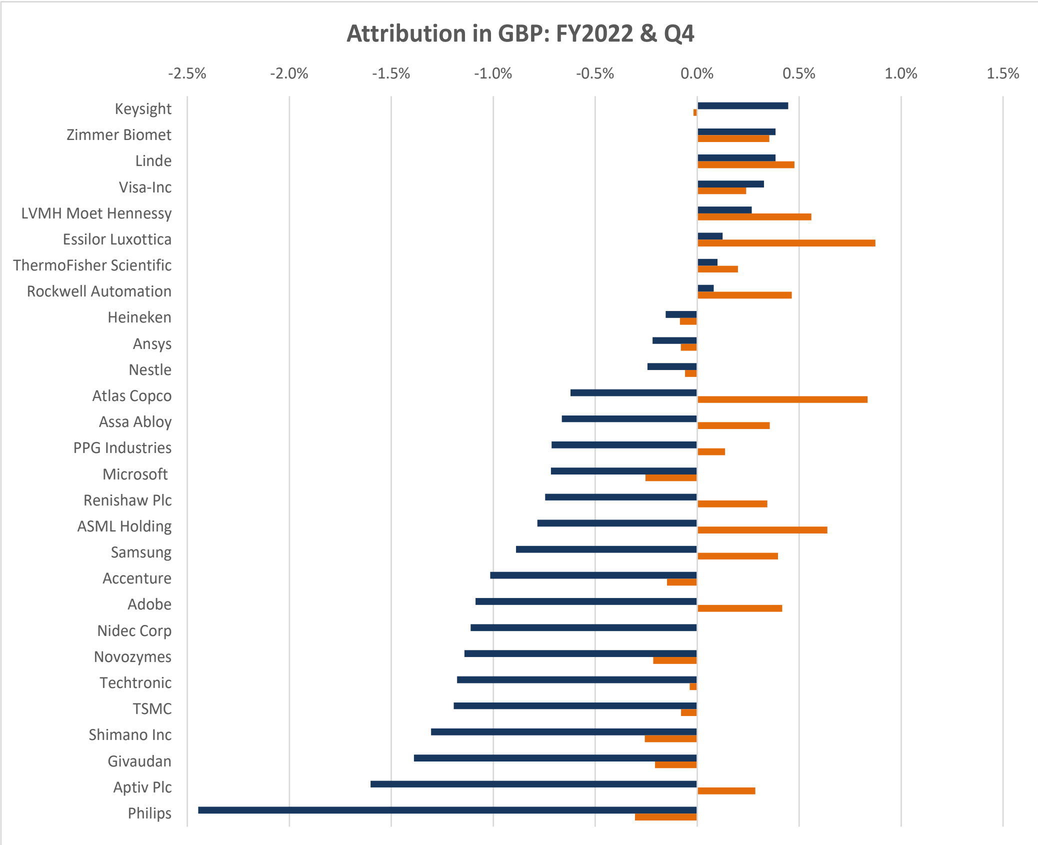
It should be remembered that these large moves where partially an unwind of significant moves in the other direction in the 3Q brought upon by the short-lived but eventful Truss-Kwarteng administration that created considerable volatility in the pricing of GBP and UK government bonds.

In 4Q, the more significant positive returns (local currencies in all cases) were from Adobe (+0.82% on an attribution basis), Zimmer Biomet (+0.81%), Linde (+0.79%), EssilorLuxottica (+0.75%) and Rockwell (+0.74%). The most significant negative returns were recorded by Philips (-0.46%), Novozymes (-0.30%)(a company we write about later in this report), Shimano (-0.28%) and Givaudan (-0.21%).

The below chart which sets alongside the full year (in blue) and 4Q (in orange) local currency attributions gives some sense of the reversionary move that took place in the 4Q of the year.



The second, below chart, indicates the full year and 4Q attributions in GBP, which delineates the actual attributions to the portfolio for the quarter and the year.



With respect to the outsized negative return from Philips experienced during the year, we have written about this company in previous quarterlies and reprise the previous comments which, to our minds, still hold as valid.

In the lee of significant product recalls, Philips recently released further testing results for their Dream Station 1 CPAP devices, following previous updates in December 2021 and June 2022. These extension recalls and tests have come to represent 68% of registered devices globally. Headline results appeared generally positive, citing 'exposure to particulate matter...is unlikely to result in appreciable harm to health in patients'.

However, additional toxicological risk assessment on devices that have undergone ozone cleaning is still ongoing, as well as an agreement regarding the Consent Decree with the US Food & Drug Administration Department (an arm of the US Federal Government), the conclusion of which will be crucial in understanding the future recovery trajectory for Philip's Sleep business.

Last year, Philips increased provisions from EUR900mn to EUR1.3bn to take into account for expanded volumes and higher costs under inflation and does not include potential litigation settlement costs. It is on track to complete production of c.90% of the 5.5m devices repaired or replaced by the end of 2022, with the remaining 10% to be shipped through 1H 2023.

A new CEO Roy Jakobs was introduced in October, taking over the reins from predecessor Frans van Houton. Roy Jakobs has been with Philips since 2010 and has a track record for business transformations. The primary task in his new role is to focus on the turnaround the Respironics business, which he had already been responsible for since the remedial operations was initiated in June 2021.

He are of the belief that Philips is approaching the beginning of the end of this saga and that at 10x earnings the shares represent excellent value.

Outlook

The low NAV of the 'A' class of the fund in the year was £13.34, recorded on 17th June 2022. Returns from that point were +9.4% to the year's end.

Broadly speaking, in the long run, the returns from the strategy are a function of two things: earnings growth and valuation change.

The earnings growth of a global company is the rough sum of three factors: 1) global GDP 2) sector versus world outperformance (in earnings, not share price terms) and 3) company versus sector outperformance (ditto). Clearly, we do not make the weather in determining global GDP and that should be regarded as an exogenous factor but we do exercise decision making when it comes to (2) and (3): sector and company selection. All of the sectors to which the portfolio is exposed are expected to be long term outperformers: so called GDP plus or GDP+ sectors. Similarly, all of the companies we are invested in, we expect to outperform their sectors in respect of their long-term earnings growth.

Within this paradigm, we do not simply try to invest in the highest growth sectors in the world. In a perfect world, gifted with perfect foresight, we might well try to do this. What often is the outcome of such a perfect world approach is to invest in the companies and sectors that have recorded the highest trailing growth rates. It can very often end up being a momentum strategy. Momentum offers the prospect of short-term positive confirmation and longer-term disappointment. Witness the disappointment being currently experienced by investors in Meta, Twitter and Tesla, for example.

So, by contrast, the sectors and companies we invest in will have variable growth rates but what we aim to achieve is "growth-with-legs" if you like, that is endurance in growth rates. Endurance is based on utility, not fashion. The question we ask ourselves all the time is: do we really need the products and services of the companies in question and will we need them in 10 years time?

We map the consequences of three broad sets of outcomes for the global economy and their impacts on the price and valuation of the portfolio. To speak about even three broad scenarios is a simplification and suggest we are set up for one of the three to prevail. We might expect that the final set of outcomes might part derive from each third of the outcomes set out in the table below.

SCENARIO	OPTIMISTIC OUTCOMES	MODERATE OUTCOMES	DIFFICULT OUTCOMES
Interest rates	Last hikes take place in first quarter of 2023	Central Banks move to quarter point hikes and adopt a wait and see strategy	Second inflationary pulse and hawkishness through the year
Globalisation and geopolitics	Pragmatism wins out, especially from China. More areas of common cause (Ukraine, environment, regulation)	Trade friction continues but global companies adequately navigate	Increasing trade barriers and capital restrictions
Corporate margins	Full recoup by global companies from inflationary impulse	Substantial recoup of margins by global companies	Several points downward adjustment in operating margins
Valuation of equities	Moderate upward increase in valuations predicated on falling core bond yields	Little upward or downward movement from current levels (global equity PE currently = 15.1x)	More than 20% devaluation in global PE ratio (-20% from current levels would imply 12.6x or below)
Relative performance by:			
Style	Reflation of the valuation of growth equities	Small differential in performance of Growth and Value equities	As per 2022, only unfashionable and ESG comprised sectors enjoy relative performance
Sector	High ROCE/WACC companies/ sectors outperform	Environment does not overall favour Staples or Cyclicals	Energy, Banks and some domestic franchises outperform
Geography	Positive real terms performance from both Developed and Emerging equities	US hegemony over returns wanes, other regions begin to outperform	Highly uneven geographic distribution of returns. Domestic companies prevail over international companies.
Global Leader NAV progression	> +20% over the year	> +10% over the year	> -10% over the year

In the Moderate scenario described above, the NAV progression of the portfolio could broadly follow the earnings growth of the companies within (as groups of equities will eventually do). This might plausibly slow-down from previous achieved levels but still remain positive. The last 5 years average earnings per share growth was 13.4%.

Within this expectation framework, we need to bear in mind that the background to the world economic outlook has inflation within it. The sales and therefore earnings of leader companies, particularly those with robust franchises that is a point of focus for the portfolio, would tend to hold up well in this environment.

- James Spence

DEEP DIVE

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Oscar Mackereth

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Novozymes/Chr. Hansen merger

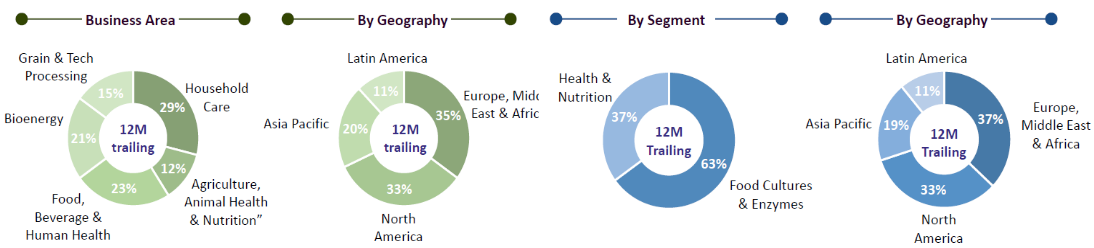
Within the Global Leaders portfolio, we have owned Novozymes since 2015. In December 2022, Novozymes announced its intention to merge with Chr Hansen, as company on our approved list for investment. In this journal we investigate the implications of the merger for our holding and wider issues surrounding corporate combinations.

Two Danish bioscience players, Novozymes and Chr. Hansen, released a joint statement on 12th December 2022 announcing a merger of their businesses which will result in the largest ever deal size in history between two Danish entities for the sum of DKK87.1bn (~EUR11.7bn).

The two companies share not only Danish heritage but also an affiliation with Novo Holdings, the largest shareholder of both groups with 25.5% and 22% stakes in Novozymes and Chr. Hansen, respectively. Novo Holdings is wholly owned by the Novo Nordisk Foundation, the largest charitable foundation in Denmark, whose investment portfolio is charged with a mandate to invest in life science technology businesses.

Novozymes is the world's largest producer of industrial enzymes, a biological catalyst in the form of proteins, used for accelerating chemical reactions in wide ranging applications across the food & beverages, household detergents, textiles treatment, biofuels, and agriculture industries. Chr. Hansen is also in the enzymes and microbials (cultures, bacteria, and probiotics) business, with a heavier specialism towards the food and agriculture sectors, particularly strengths in the dairy, human and animal probiotics subsegments.

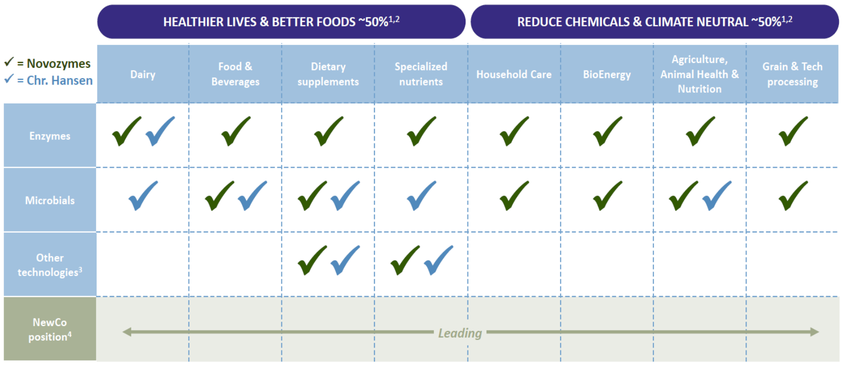
Chart 1: Novozymes (green) and Chr. Hansen (blue) 12M trailing revenue breakdowns by business segment and geography



Source: Company presentation

The business rationale for the combination is therefore relatively unambiguous. The two companies are complementary in their capabilities in terms of enzyme and microbial R&D areas and manufacturing processes which primarily consists of culturing, extraction, and fermentation technologies. The overlaps in end-markets and geographies also creates synergies in enhanced economies of scale on the cost side in procurement and manufacturing.

Chart 2: Business overlap between Novozymes and Chr. Hansen



Source: Company presentation

The merger leverages the complementary qualities of the two companies with the ambition to establish a world leading bio-solutions business owning a broad toolbox to address the global megatrends in sustainability and healthy living.

Historically, Novozymes focused on enzymes, while Chr Hansen's efforts were put into leadership in microbes. That distinction has begun to blur, however.

Enzymes are a clean technology that reduce the use of chemical catalysts in certain industrial processes. Given its biological nature, high specificity, and low required activation energy properties, it is much less demanding on resources such as water or energy and does not produce harmful polluting residues unlike its chemical counterparts. This is aligned with the sustainability and resource efficiency commitments that enterprises globally are trying to achieve.

While enzymes are still Novozymes' primary focus at c.90% of its revenues, the company has been increasingly investing in microbials research, particularly in the nutrition and agriculture sectors including animal feeds and crop yield enhancement applications, which fits squarely with Chr. Hansen's area of expertise. This again aligns well with the theme of enabling healthier lives and tackles the global food shortage problem.

Microbes and microbial cultures can be thought of as one level of complexity above enzymes. Originally a specialist in the starter cultures for fermentation of dairy products, Chr Hansen has applied its expertise in the control of microbial cultures to probiotics, vinification and cutting edge bio-protection for food and agriculture.

Both companies have extensive intellectual property generation track records and spend between 8-12% of sales per annum in R&D respectively. Novozymes owns 2/3 of the global patents in enzyme technology whilst Chr. Hansen owns >40,000 bacterial strains in its proprietary library. Collectively, the combined group will have around 2,000 employees working across 38 R&D centres globally. Alongside traditional industries, the two groups have been exploring novel technologies and open up future markets in plant based-foods/synthetic meats, HMO (human milk oligosaccharides), degradable plastics, carbon capture, amongst many more projects.

The NewCo. will expect to have annual revenues of EUR3.5bn, a combined revenue CAGR of 6-8% and operating EBIT margin of 29% by 2025. On a longer-term scale, the companies believe there is the potential to triple the size of their addressable markets by 2040, currently estimated at circa EUR15bn.

Given the relationship between enzymes and the microbial cultures that produce them, we would expect strong synergies in the development of new integrated product lines and the application of Chr Hansen microbial technologies to in house enzyme production.

Likewise on a logistical level, a merger of two Danish companies should see an ideal level of cost savings in the consolidation of duplicate central operations in the country.

Mechanics of the merger

For practicality, we understand this transaction to resemble more closely that of an acquisition, with Novozymes being the acquiring party. Its revenues are almost double Chr. Hansen and its shareholders will represent 54% of the combined market capitalisation.

The combined company will operate under the name of Novozymes, with Chr. Hansen registered as a secondary name. However, a new name and brand will be developed over time.

Upon completion, Chr. Hansen shareholders free float shareholders will be compensated through receipt of 1.5326 newly issued B-shares in Novozymes, in exchange for each Chr. Hansen share previously held. This implies an intrinsic price of 662DKK per Chr. Hansen share, which would represent a price-to-earnings ratio of 51X and a 49% premium to the prevailing market price at the time of announcement.

The true premium and PE is marginally lower (38% / 47x). Novo Holdings has agreed to exchange its Chr. Hansen shares at a ratio of 1.0227x, a one third discount to the agreed acquisition price.

The new company's governance and management is expected to have representation from both Novozymes and Chr. Hansen. The current Chief Executive Officer of Novozymes will assume leadership of the combined group as CEO and the Chief Financial Officer will be the current CFO of Novozymes. On the other hand, the Chair of the Board of Directors shall be nominated by Novozymes, and the Vice-Chair nominated by Chr. Hansen. Finally, Novozymes, Chr. Hansen and Novo Holdings will all nominate two members to the board of directors.

Our opinion

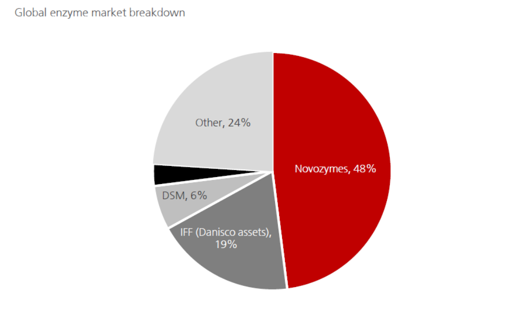
In our view, the proposed acquisition makes strategic sense. We regard this move as Novozymes, which is more exposed to industrial end users of its products, bringing in exposure to consumer products though Chr Hansen. This should reduce the cyclicality contributed by some of Novozyme's business lines such as Bioenergy (18% of revenues), which are susceptible to commodity price fluctuations.

Equally, the end markets of Chr Hansen have exhibited slightly superior growth prospects, when comparing a 10 year revenue CAGR of 4.6% for Novozymes versus 6.9% for Chr Hansen. The collection of innovative business lines dubbed "Lighthouses" by Chr Hansen (Bioprotection, Fermented Plant Bases & Health, HMOs) grew 14% in 2021/22. These are currently small business lines for Chr Hansen and will be even smaller when measured versus the combined entity but have longer runways for growth than some of the more mature applications of enzymes and bacteria.

With respect to competition concerns, we remain sanguine.

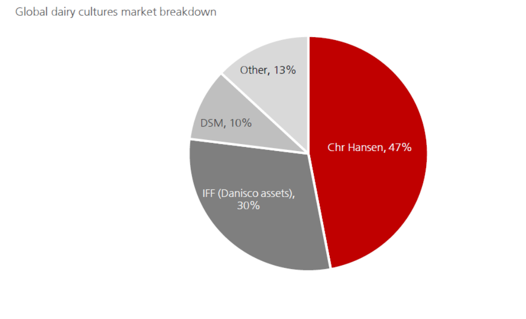
The merger of two Danish companies will fall under the jurisdiction of the Danish Competition & Consumer Authority, who's enforcement of the Danish Competition Act is modelled on EU competition law. UBS estimates that only 8% of Novozymes sales directly overlap with Chr Hansen product lines whilst 24% of Chr Hansen sales overlap with Novozymes.

Figure 17: Novozymes has a dominant, 48% market-leading share of the global enzymes market



Source: UBS analysis and estimates

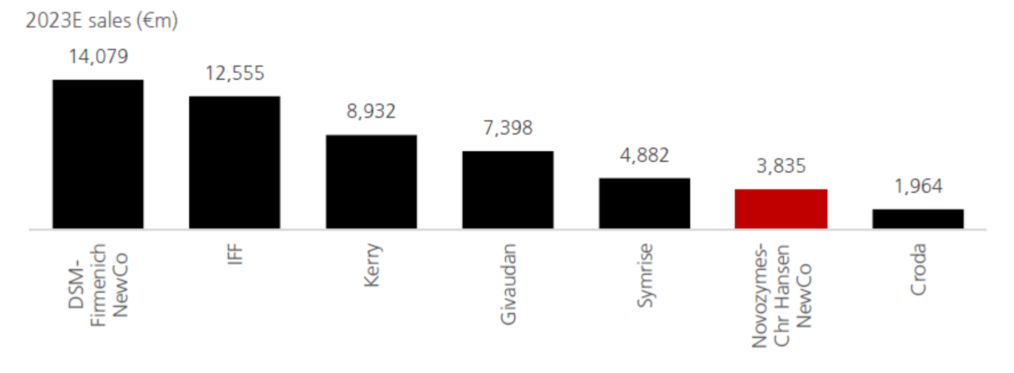
Figure 18: Chr Hansen has a dominant, 47% market-leading share in starter cultures



Source: UBS analysis and estimates

In Agricultural and Animal Health the combined entity will have a type of horizontal integration between enzyme and bacterial solutions but we do not detect an unacceptable level of concentration emerging. Although both microbial cultures and enzymes are used in aiding livestock digestive processes, they serve different parts of gut health.

In fact, sales of the combined company would still make it one of the smaller players in the bio-solutions and broader ingredients space.



Source: Company reports, UBS analysis and estimates

Although the price paid by Novozymes for Chr Hansen could be argued to be fully valued, and market reaction on announcement would suggest as such, we sense this is a defensive manoeuvre.

The price paid by Novozymes can be interpreted as a recognition of the strategic importance of ensuring the global specialist in such a complimentary product suite did not fall into competing hands.

Chr Hansen has been on our approved list for since 2018. While we liked the business its valuation has been out of range. Frustratingly, recent multiple compression saw the stock move toward a plausible range for entry. Despite the price paid we believe the end business we now own offers attractive prospects as a consolidated bio-solutions player. Alongside the strong growth profile previously discussed, the combined entity would also have the highest R&D to sales ratio of competitors, underscoring their focus on the deployment of enzyme and microbial cultures into new avenues.

We believe this transaction is a supportive case study on the successful identification of attractive companies and industries using the Cerno Global Leaders methodology.

- Ion Sioras, Oscar Mackereth, Fay Ren

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TM CERNO *Global Leaders*

FUND FACTS

Holding History

Company Name	Description	Holding Peirod*
Samsung Electronics	Dominant in semiconductor memory chips and leader in smartphones	>9 years
Nestle	Diversified global food & beverage company	>9 years
Visa	Largest global electronic payments network	>9 years
Zimmer Biomet	Leading orthopaedic care specialist	>9 years
Linde	Largest industrial gas provider in the world	>8 years
Renishaw	Engineering specialist focused on equipment for precision measurement	>8 years
PPG	Coatings company leading in the industrial/specialty business	>8 years
Shimano	Dominant supplier of cycling componentry	>7 years
Givaudan	Leading player in the Flavours and Fragrance industry	>7 years
Novozymes	Produces enzymes which application in a wide variety of daily products	>7 years
Assa Abloy	World's leading manufacturer of security locks and automatic doors	>7 years
LVMH	The largest luxury goods conglomerate and most diversified	>6 years
EssilorLuxottica	Vertically integrated producer of luxury, fashion and sports eyewear	>5 years
Heineken	Brewer with a strategic bias to premium beer, interests in low alcohol/craft	>5 years
Atlas Copco	Dominant producer in air compression and vacuum techniques	>5 years
TSMC	World's largest pure-play semiconductor foundry	>4 years
ASML	Leading photolithography tools manufacturer for the semiconductor industry	>3 years
Microsoft	Dominant player in computing operating system and business software platform	>3 years
Philips	Healthcare technology company serving professional and consumer markets	>3 years
Accenture	Independent technology consultant and outsourcing provider globally	>2 years
Aptiv	Leader in smart vehicle architecture enabling autonomous driving	>2 years
Techtronics	Global leader in power tools and floor care	>1 year
Adobe	Dominant digital creativity software and marketing CXM tool provider	>1 year
Rockwell	Largest pure play in industrial automation and control processes	>1 year
Thermo Fisher	Diversified provider of scientific instrumentation, medical reagents and consumables	>1 year
Keysight	Global leader in testing and validation of products utilising the electromagnetic spectrum	>1 year
Ansys	Leading developer of digital simulation software for product development	<1 year

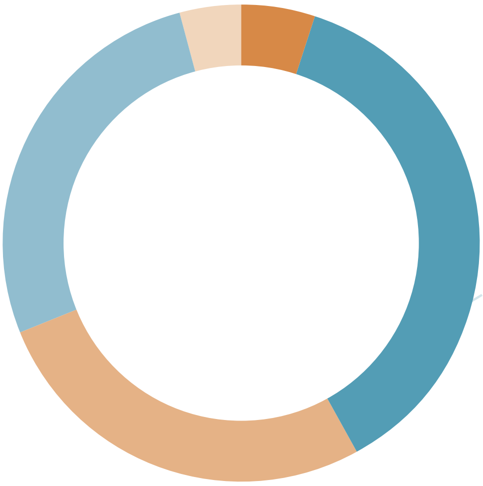
*Holding periods since inception of strategy

Sales by Geography

Global Leader companies are, by definition, global in their sales. Their domiciles are not an investment consideration and most of the companies have outgrown their home market base many decades ago.

The perceived reliability of the earnings of constituent companies and the fact that they have commanding market shares in their industries means that they will trade at a premium to wide equity market aggregates. The question is how much? The portfolio has an aggregate Return on Equity of 24% versus 15% for the World Equity Index.

We aim to rationalise margins, earnings consistency and economic value against the price paid. The fund's approach to vaulation could be described as growth at a reasonable price (GARP).



Sales by Geography

- North America - 39%
- Asia - 28%
- Europe - 26%
- Latin America - 4%
- Rest of World - 3%

Performance

Year Ended	Dec 2022	Dec 2021	Dec 2020	Dec 2019	Dec 2018
Net Performance	-17.8%	+16.7%	+27.4%	+26.3%	-5.2%

Fund Codes

	ISIN:	SEDOL:	Bloomberg:
A Acc	GB00BF00QK62	BF00QK6	TMCGLAA LN
A Inc	GB00BF00QJ57	BF00QJ5	TMCGLAI LN

Key Fund Information

Investment Objective	To achieve long term growth in value
Sector Exclusions	Banks, Fossil Fuels, Commodities, Tobacco, Armaments
Authorised Corporate Director	Thesis Unit Trust Management (Authorised and regulated by FCA) Exchange Building St John's Street, Chichester, West Sussex PO9 1UP
Fund Custodian	The Northern Trust Company
Auditor	Pricewaterhouse Coopers LLP
Fund Legal Structure	UK OEIC (UCITS)
Inception Date - Fund	November 2017
Fund Saving Structures	SIPPs, ISAs & JISAs
Key Fund Documents	cernocapital.com/cerno-global-leaders
Ongoing Charges - Class A (incl. Management Fee)	Management Fee 0.65% Other Fees (incl. running costs) 0.19% OCF 0.84%
Transaction Costs	Explicit Costs 0.01% Implicit Costs 0.11%*
Initial Charge	5% - waived as standard
Contact	Tom Milnes 020 7036 4126 tom@cernocapital.com

*We have only started calculating this data from 1st July 2021, and as such this is an estimate based on the available data so far