

novo
holdings

Investing to benefit people and the planet

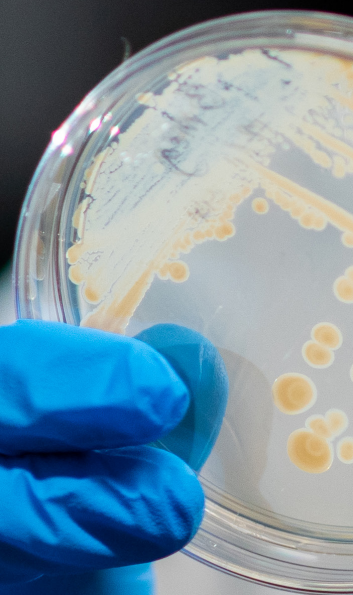
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annual report

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Novo Holdings A/S
Tuborg Havnevej 19
DK-2900 Hellerup
CVR 24257630

About Novo Holdings A/S

Novo Holdings is a holding and investment company that is responsible for managing the assets and wealth of the Novo Nordisk Foundation, one of the world's largest enterprise foundations. The purpose of Novo Holdings is to improve people's health and the sustainability of society and the planet by generating attractive long-term returns on the assets of the Novo Nordisk Foundation.

Novo Holdings is the controlling shareholder of Novo Nordisk and Novozymes (the Novo Group companies) and manages an investment portfolio with a long-term return perspective. Novo Holdings invests in life science companies at all stages of development and, in addition, manages a broad portfolio of equities, bonds, real estate and infrastructure assets as well as private equity investments.

As of year-end 2022, Novo Holdings had Total Investment Assets of DKK 805 billion (EUR 108 bn).

Further information: www.novoholdings.dk

About the Novo Nordisk Foundation

Established in Denmark in 1924, the Novo Nordisk Foundation is an enterprise foundation with philanthropic objectives. The vision of the Foundation is to improve people's health and the sustainability of society and the planet. The Foundation's mission is to progress research and innovation in the prevention and treatment of cardiometabolic and infectious diseases as well as to advance knowledge and solutions to support a green transformation of society.

Further information: www.novonordiskfonden.dk

Contents

Management review

Introducing Novo Holdings

- 06 Letter from the Chair and the CEO
- 08 Our Fundamentals
- 09 Novo Holdings structure
- 10 Novo Holdings at a glance
- 12 Our business model
- 14 2022 performance highlights

Our business

- 18 Investment strategy
- 29 People and organisation
- 32 Responsible Investments
- 34 Financial performance 2022 and outlook for 2023
- 36 Business and financial risk

Governance

- 39 Corporate governance
- 40 Board of Directors and Leadership Team

Statements

Financial statements

- 46 Statement of comprehensive income
- 47 Balance sheet
- 48 Equity statement
- 49 Cash flow statement
- 51 Notes to the financial statements

Management's statement and Independent Auditor's report

- 76 Management's statement
- 77 Independent Auditor's report

Management review

Introducing
Novo Holdings



Our aspiration is to be a leading responsible investor, recognised for delivering strong financial returns and positive societal impact.

Letter from the Chair and CEO

A defining year for Novo Holdings and the Novo Group

December 12, 2022 was a historic day for the Novo Group and Novo Holdings, with the announcement of the proposed merger of Novozymes and Chr. Hansen, two of our largest shareholdings. The combination will create an industrial biosolutions powerhouse, strongly positioned to deliver long-term value to all stakeholders and to contribute to the green transition.

Overall, the year 2022 has been among the most challenging in recent memory, from both a geopolitical and economic perspective. The market downturn has negatively impacted our returns. However, it is a testament to the resilience of our portfolio and the life science sector, that our relative performance remained strong, with outperformance relative to our benchmark.

Our performance in 2022 underscores the importance of the diversification strategy we commenced in 2019, with our expansion into, among others, real estate, infrastructure, and credit bonds (see page 28).

To enhance collaboration and knowledge-sharing, this year we held our inaugural CEO Life Science Summit. CEOs from our portfolio companies, senior members of our network and industry experts gathered near Boston in the USA to discuss important areas of innovation, including biosolutions and the green transition (see pages 30-31).

Investment Portfolio highlights

The purpose of Novo Holdings is to improve people's health and the sustainability of society and the planet by generating attractive long-term returns on the assets of the Novo Nordisk Foundation and to be a supportive owner of the Novo Group companies.

Our Investment Portfolio comprises Life Science Investments (Seed Investments, Venture Investments, Growth Investments and Principal Investments, totalling 54% of the portfolio) and Capital Investments (46% of the portfolio).

Financial highlights summary

The Novo Holdings Investments Portfolio (excluding Novo Nordisk and Novozymes) generated a negative return of -6% in 2022 versus benchmark of -7%.

Novo Holdings realised Total Income and Investment Returns of DKK 3 billion in 2022, down from DKK 38 billion in 2021. Novo Holdings closed the year with DKK 805 billion in Total Assets, up from DKK 697 billion in 2021.

At the end of 2022, the Novo Holdings Investment Portfolio generated a 10-year average return of 11%. The 10-year average return of the Life Science Investments Portfolio and Capital Investments Portfolio stands at 13% and 9%, respectively.

Societal impact highlights

Climate challenges as well as global food and energy supply shortages over the last 12 months have highlighted the need for urgent action to tackle the world's sustainability challenges. At Novo Holdings, we strongly believe that biosolutions are part of the answer to these global crises and are an important driver of the green transition of industry and society. We are a world leading investor in biosolution innovation and, in 2022, we further expanded our team of investment professionals dedicated to the sector.

In 2022, Principal Investments invested DKK 13 billion, including the acquisitions of Medical Knowledge Group, The Ritedose Corporation, and KabaFusion (see Principal Investments, pages 20-23).

Growth Investments invested DKK 2 billion in 12 companies during 2022, taking its total portfolio to 26 companies. Investments included digital healthcare company Verana Health and animal health company Invetx (see Growth Investments, page 24).



Venture Investments amounted to DKK 3 billion, including investments into 15 new companies. Significant events for the year include the sale of portfolio companies Reviral, Checkmate and Zogenix, the IPO of Arcellx, and positive clinical milestones for F2G, Verve Therapeutics and Edgewise Therapeutics (see Venture Investments, page 25).

Seed Investments amounted to DKK 721 million in 2022, including investments in 6 new companies. 2022 has been an important year for Seed Investments, with two successful divestitures of portfolio companies, including healthcare company Syndesi Therapeutics, and agricultural sciences company BioPhero (see pages 26-27).

Novo Holdings' Asia investment team, based in Singapore, works in close collaboration with our teams in Europe and the US. This year they led a number of exciting investments, including an investment in Qure. ai, a health-tech firm using artificial intelligence to enhance medical imaging diagnostics and improve health outcomes for conditions such as tuberculosis and lung cancer.

Our non-life science investment team, Capital Investments, closed the year with DKK 83 billion of assets under management. Key highlights of the year include the growth and expansion of our real estate and infrastructure portfolios (see Capital Investments, page 28).

People and organisation

In 2022, we continued to build our presence in the US – the world's largest healthcare and life sciences market – by growing our teams in Boston and San Francisco. Our expansion is bearing fruit, with heightened investment activity – please see page 29 to find out more.

This year we welcomed new members to our Leadership team and Board of Directors. Nigel Govett was appointed Chief Financial Officer in February. Nigel has 22 years of investment experience, including, among others, careers at Oman Investment Fund and EQT. The Novo Holdings Board was joined in March by Britt Meelby Jensen, who has over twenty years of experience from the life science industry.


We would like to thank our teams for their resilience during this tumultuous year, and our Board and the Novo Nordisk Foundation for supporting our strategy. We would also like to congratulate the Novo Group companies for a very successful year - Novo Nordisk for continuing to advance treatments for chronic conditions including obesity, and Novozymes for the announcement of their merger with Chr. Hansen.

Kasim Kutay
Chief Executive Officer

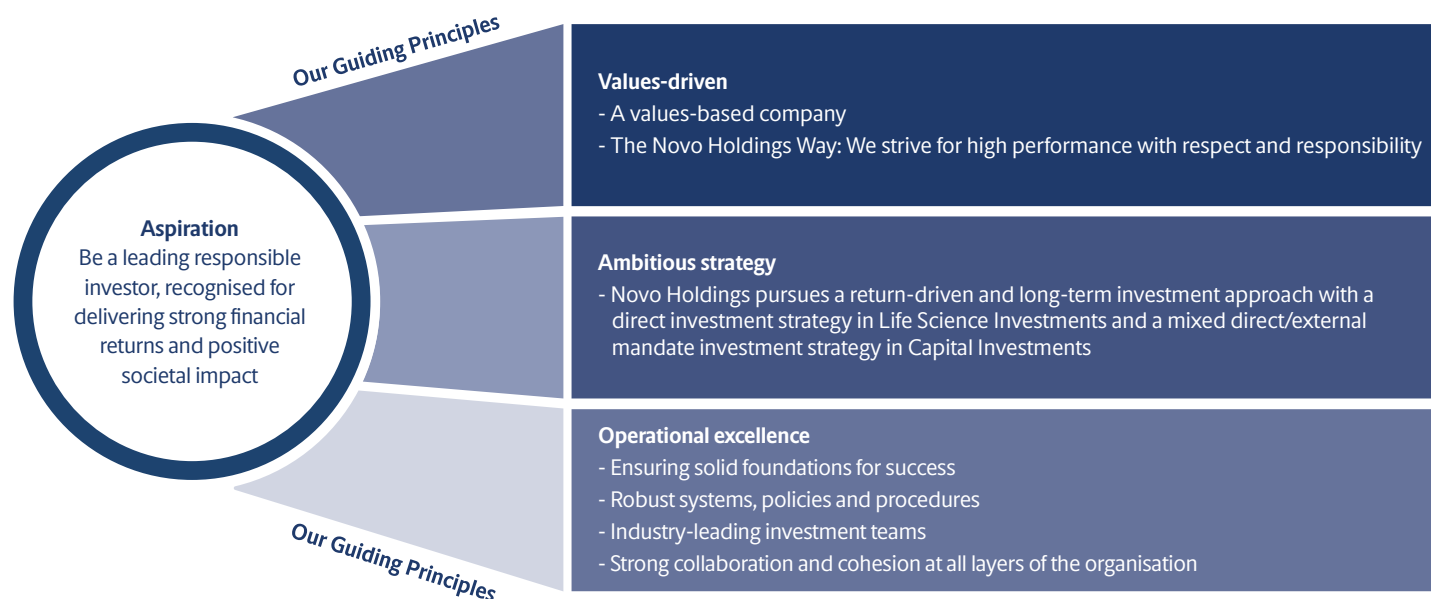
Lars Rebien Sørensen
Chair of the Board

Our Fundamentals

Purpose, Aspiration and Guiding Principles



Purpose Improve people's health and the sustainability of society and the planet by generating attractive long-term returns on the assets of the Novo Nordisk Foundation.



The Novo Holdings Way - Our ethos



Performance

- We strive to deliver outstanding long-term results
- Vision, collaboration and diversity are key to our performance



Respect

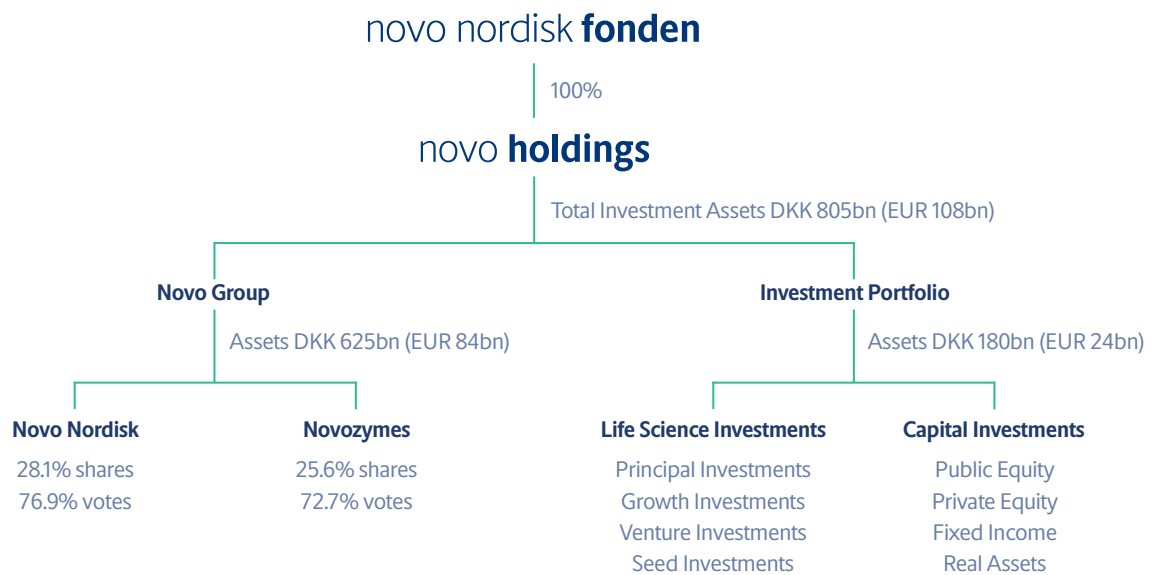
- We conduct ourselves with integrity and transparency
- We build long-term relationships based on trust and respect



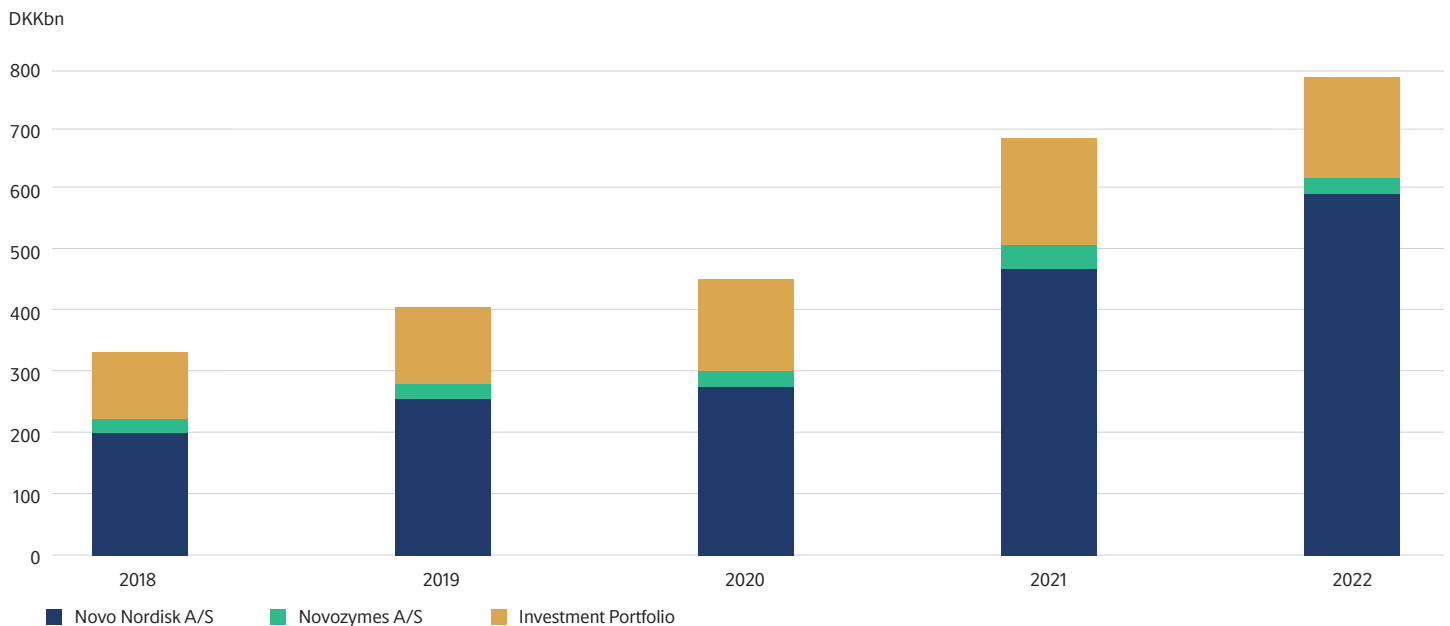
Responsibility

- Sustainability is integral to our business
- Learning is core to our organisation

Novo Holdings structure



Novo Holdings asset value 2018-2022



Novo Holdings at a glance



Global employees



Portfolio companies




Total Investment Assets



*The offices in US, UK and Asia are separate entities that provide certain consultancy services to Novo Holdings A/S, mainly within the areas of identifying and analysing various investment opportunities among life sciences companies in the US, UK and Asia as well as certain follow-up activities related thereto, such as board memberships, financial control and reporting efforts.

7%



Total 5-year average return
on the Investment Portfolio

DKK
180
bn
(EUR 24bn)



Investment Portfolio

DKK
19
bn
(EUR 3bn)



Deployed into life sciences in 2022


-6%

Return on Investment Portfolio in 2022

DKK
14
bn
(EUR 2bn)

Income from Novo Group companies

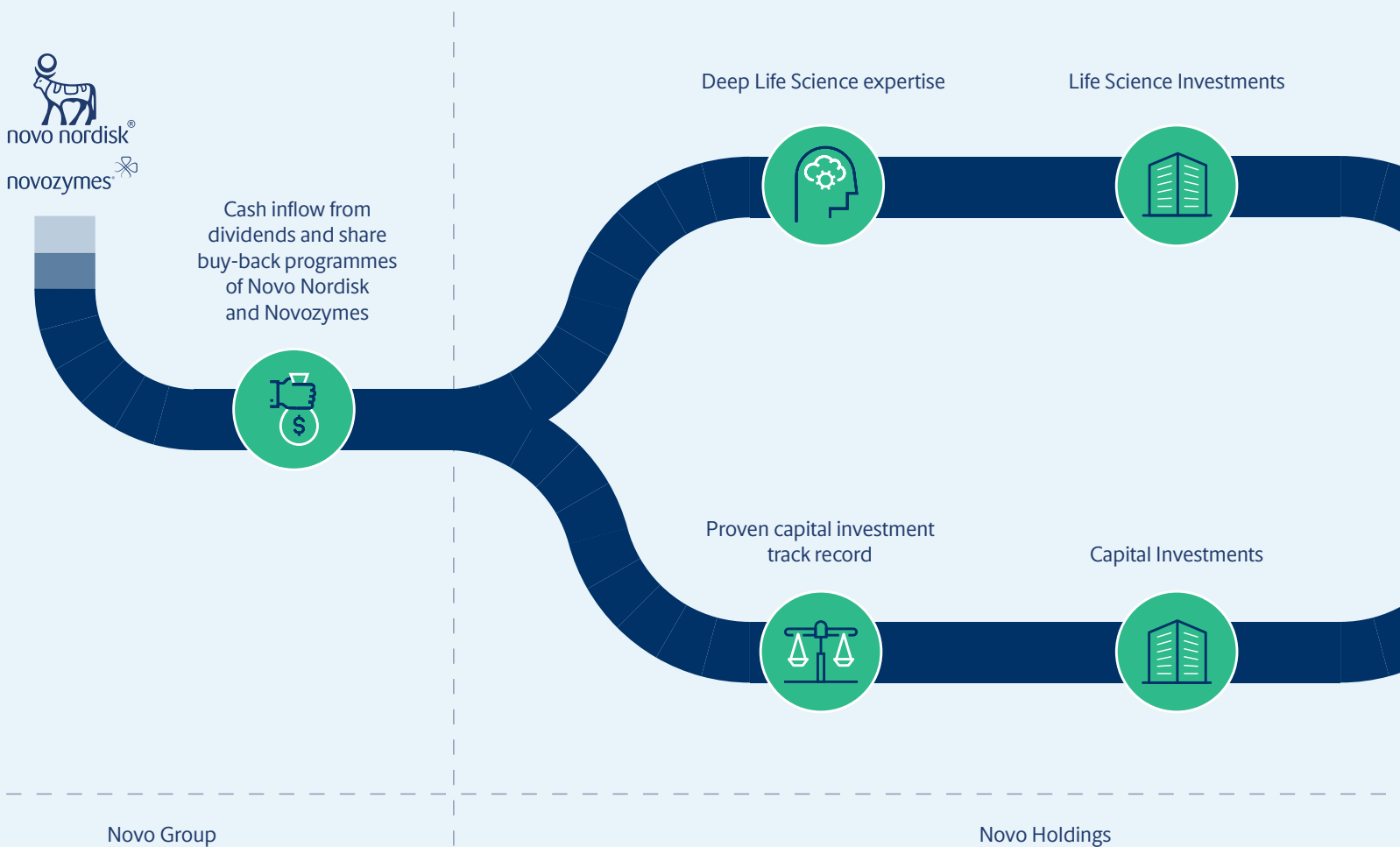
DKK
3
bn
(EUR 0.4bn)

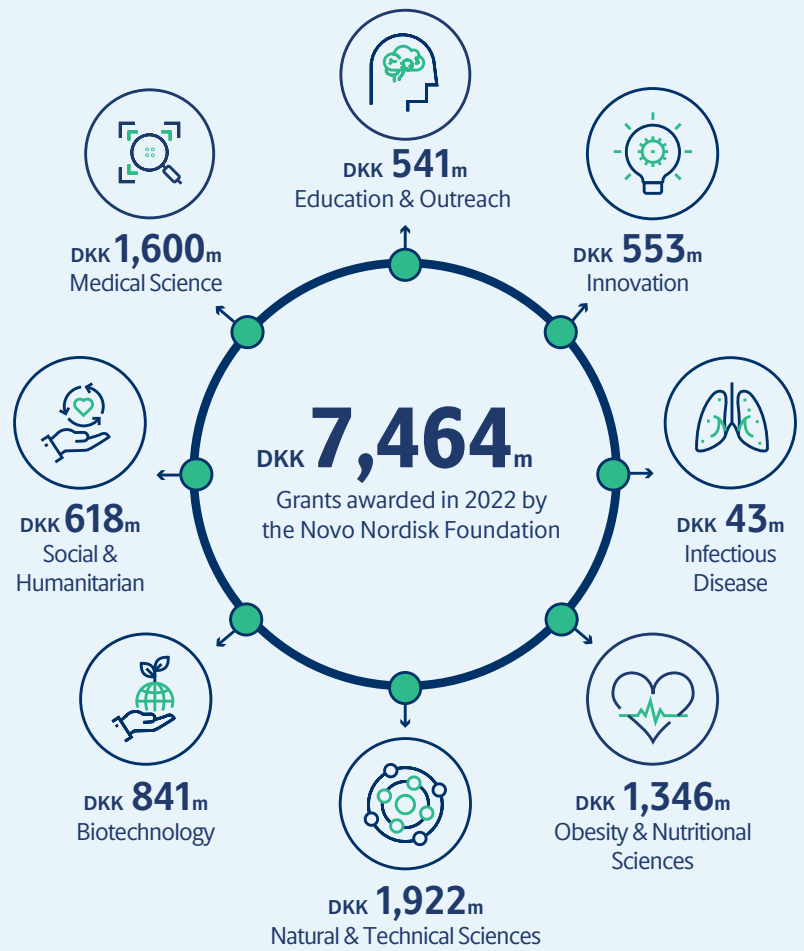
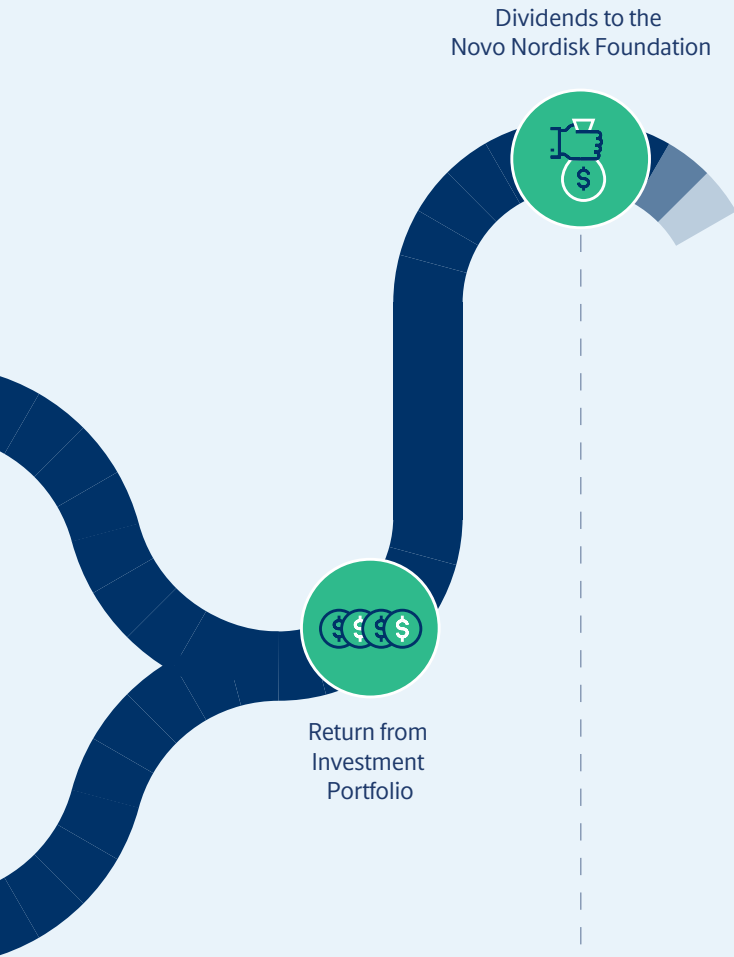


Total Income and Investment Return in 2022

Our business model

Novo Holdings is a holding and investment company that is responsible for managing the assets and wealth of the Novo Nordisk Foundation, one of the world's largest enterprise foundations. The purpose of Novo Holdings is to improve people's health and the sustainability of society and the planet by generating attractive long-term returns on the assets of the Novo Nordisk Foundation.





2022 performance highlights

Allocation and returns by asset category, investment area and Novo Group

Assets	Allocation		Returns		
	DKKbn	Share of	2022	5Y Rolling	10Y Rolling
By asset category					
Diversified Growth Assets	151	84%	-8.5%	7.3%	12.6%
Macroeconomic Risk Hedges	29	16%	6.2%	4.6%	3.8%
Investment Portfolio	180	100%	-6.1%	6.9%	11.3%
By investment area					
Life Science Investments	98	54%	-6.3%	7.3%	12.8%
Capital Investments	82	46%	-5.6%	6.0%	8.7%
Investment Portfolio	180	100%	-6.1%	6.9%	11.3%
Novo Group					
Novo Nordisk A/S	600	96%	29.6%	25.5%	20.3%
Novozymes A/S	25	4%	-33.7%	1.3%	9.6%
Novo Group	625	100%	24.8%	23.7%	19.6%

Allocation and returns of invested portfolio by asset class

Asset class	Allocation		Returns		
	DKKbn	Share of	2022	5Y Rolling	10Y Rolling
Asset category and asset class					
Diversified Growth Assets	151	84%	-8.5%	7.3%	12.6%
Public Equity	68	38%	-18.4%	3.2%	11.2%
Private Equity	53	29%	8.5%	15.8%	13.8%
Venture Capital	16	9%	-9.7%	10.5%	28.8%
Credit	14	8%	-2.2%	4.1%	5.9%
Macroeconomic Risk Hedges	29	16%	6.2%	4.6%	3.8%
Real Assets	13	7%	21.8%	20.5%	16.8%
Bonds & Cash	16	9%	-3.1%	-0.1%	0.6%
Investment Portfolio	180	100%	-6.1%	6.9%	11.3%

Five-year summary					
DKK billion	2022	2021	2020	2019	2018
Income statement					
Income from Novo Group companies	14	14	13	11	11
Return from Life Science Investments	-6	12	11	7	2
Return from Capital Investments	-5	12	5	8	-1
Total Income and Investment Return	3	38	29	26	12
Operating profit	2	37	29	26	11
Net profit for the year	7	33	25	23	12
Balance sheet					
Equity	127	159	131	114	97
Total assets	186	187	156	132	110
Total investments assets*	805	697	457	411	331
Key ratios					
Equity ratio	68%	85%	84%	87%	88%
Global employees	152	111	109	87	68

* Total investment assets (at market value) include Novo Group companies with A and B shares of the companies valued using the quoted B-price at closing 31 December of the respective year.

Returns

All returns are in DKK and reflect total returns, excluding internal costs. Income from Novo Group companies (Novo Nordisk and Novozymes) consists of dividend and share buy-back programme payouts. Returns on Life Science Investments are calculated on an Internal Rate of Return (IRR), based on the book value at the end of the measurement period and cash flows within the measurement period compared with the book value at the beginning of the measurement period. Capital Investments' returns and Investment Portfolio returns are based on Time Weighted Returns (TWR). Whereas asset category returns are based on TWR, the underlying returns by asset class reflect a mix of IRR and TWR, with Private Equity, Venture Capital and Real Assets being measured by IRR and the remaining asset classes based on TWR.

Management review
Our business



With our life science investments, we aim to drive the development of therapies for unmet medical needs.

Investment strategy

The overriding strategy of Novo Holdings is 1. to be a stable and supportive owner of the Novo Group, 2. to generate attractive long-term returns that allow us to both deliver an income to the Novo Nordisk Foundation and to grow the Investment Portfolio, 3. to allocate a significant portion of our funds to direct life science investing, where we can leverage our heritage and deep-rooted insights, 4. to invest, both through specialist portfolio managers and directly, across the asset classes including equities, fixed income and alternatives through Capital Investments, and 5. to invest for positive societal impact.

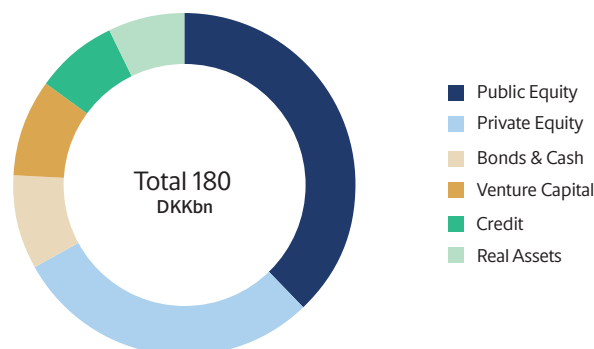
By the end of 2022, 54% of the Investment Portfolio was allocated to Life Science Investments and 46% allocated to Capital Investments.

During 2022, complying with the risk tolerance set by the Novo Nordisk Foundation, balancing risk and returns with the projected grant payouts, we continued the implementation of our investment strategy towards 2023. The strategy entails increased diversification of our Investment Portfolio over the coming years, largely achieved by further expansion of our Capital Investments Portfolio into real assets, private equity (non-life science) and technology venture capital and by broadening our geographical footprint in the life sciences sector.

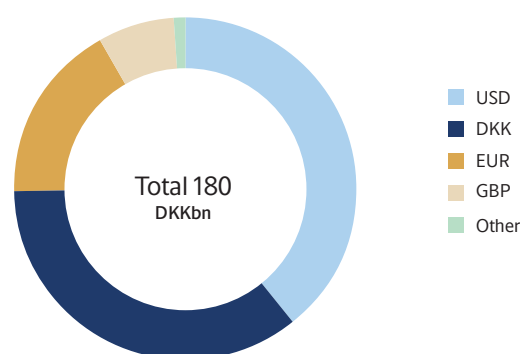
By end of 2022, the Investment Portfolio was valued at DKK 180 billion and is predominantly allocated towards equity, with public equity representing 38% and private equity representing 29% of the portfolio, respectively. The bonds and cash portfolio represent 9% of the Investment Portfolio, venture capital represented 9%, credit 8% and real assets 7%.

The geographical representation of the Investment Portfolio is largely unchanged compared to the beginning of the year, with around 39% of the portfolio exposed to USD, 35% to DKK, and 17% exposed to EUR.

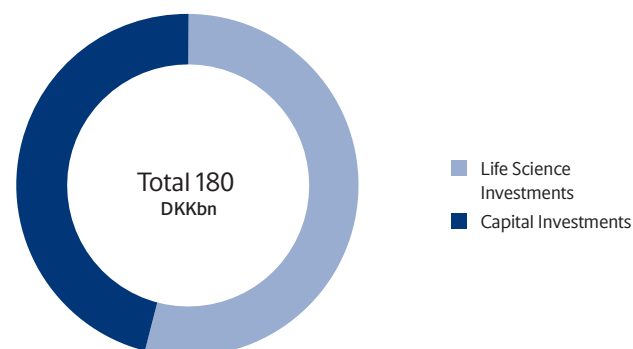
Investment Portfolio split by asset class, end of 2022



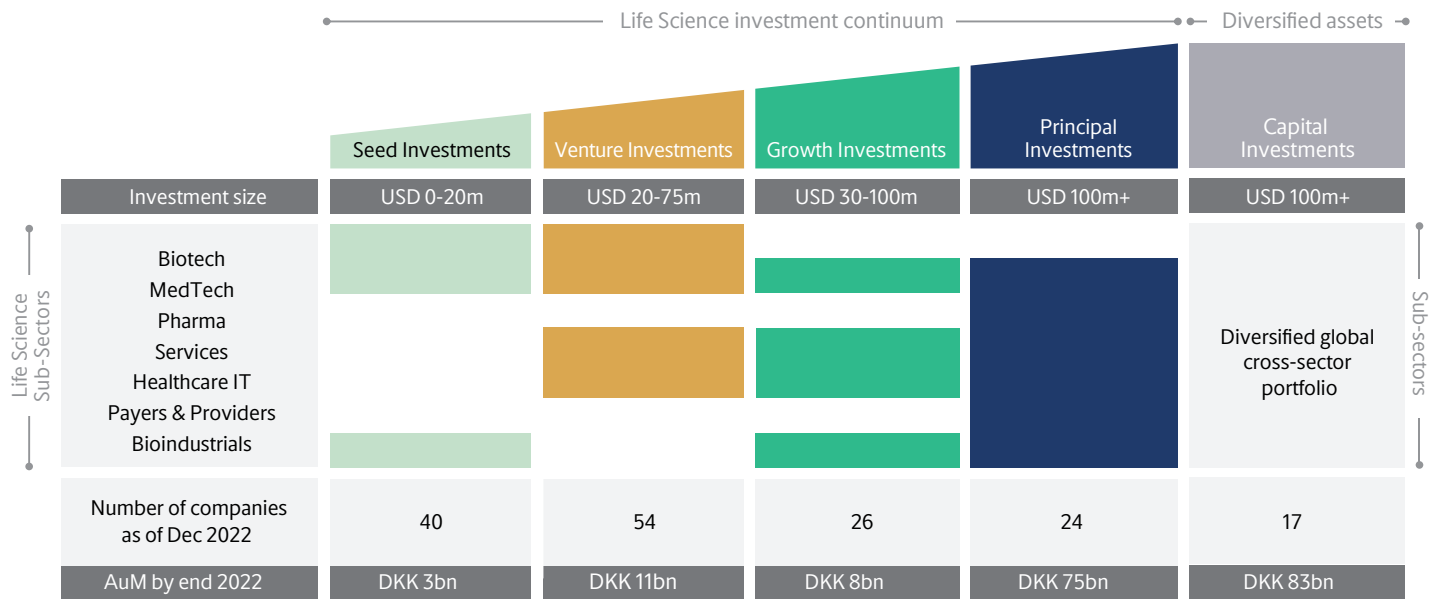
Investment Portfolio split by currency, end of 2022



Investment Portfolio split by Life Science Investments and Capital Investments, end of 2022



Capital deployment through five dedicated investment teams



Since the inception of Novo Holdings in 1999, we have invested in the life sciences sector. Initially spearheaded by Venture Investments, this focus and effort has developed further, with the addition of Seed, Growth and Principal Investments. Today we invest across the full continuum of the life sciences sector, from early start-ups to global well-established companies. During 2022, we increased our presence in Asia by adding four colleagues, complementing and further diversifying our Life Sciences Investments Portfolio outside of Europe and the US.

The Capital Investments team provides us with global exposure outside the life sciences sector and, in line with our Strategy 2023, we are in the process of expanding and further diversifying the portfolio. In support of this, we have established dedicated resources focusing on private equity and venture capital (non-life science), real assets and credits, as well as increased our efforts for the management of public equity in-house.

Principal Investments

Principal Investments invests in leading, well-established, growth-oriented healthcare and life science companies. The team focus on long-term sustainable value creation through an engaged, supportive ownership approach, targeting both control, co-control and minority investments. Principal Investments' engaged ownership approach provides its portfolio companies with strategic support, access to a broad life science network and deep sector expertise.

Operating out of Copenhagen, Principal Investments also has offices in London and Boston (see pages 22-23). Principal Investments works in close collaboration with Novo Holdings' Asia investment team, based in Singapore.

Year in review

Geopolitical and financial market volatility were significant during 2022, dampening deal flow most notably in the second half of the year. Despite this, Principal Investments had a successful year, with strong underlying performance in its portfolio companies and a continued high pace of capital deployment.

By year end, there were 24 companies in the Principal Investments portfolio, with 12 companies headquartered in North America, 9 in Europe, and 2 in Asia. Of these, 12 are privately held companies, and 12 publicly

listed. From a subsector perspective, the portfolio's largest exposure is towards life science services, medtech, bioindustrials and pharma. The Principal Investments total portfolio was valued at DKK 75 billion at the end of 2022, compared to DKK 71 billion at the end of 2021.

Investments and financings

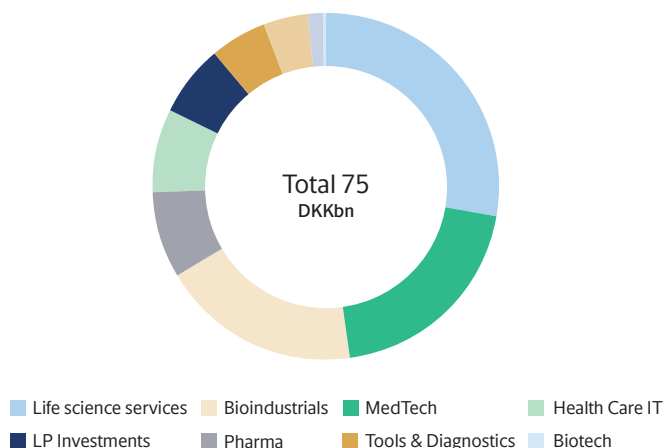
During 2022, Principal Investments deployed DKK 13 billion of equity into three private US control investments and four investments in publicly listed US companies.

Two of the control investments closed in the first half of 2022: Medical Knowledge Group, a tech-enabled biopharma commercialisation services company and The Ritedose Corporation, a blow-fill-seal contract manufacturing organisation. In November 2022, the third control investment was completed with the acquisition of KabaFusion, a US provider of home infusion services.

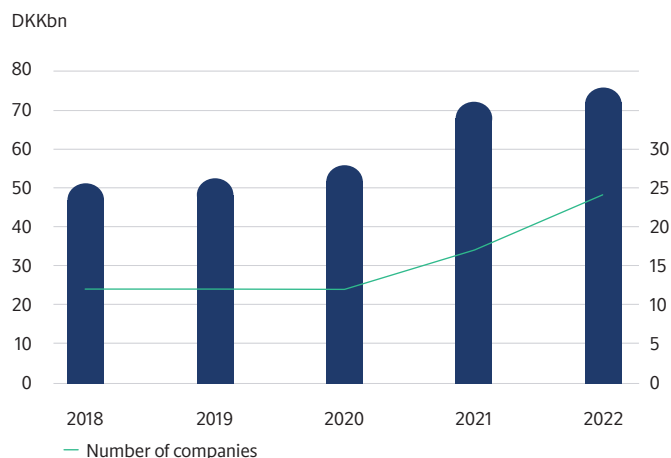
Exits

The most significant exit took place in the second half of the year. Envirotainer, a global provider of mission-critical, temperature-controlled air cargo services for the pharmaceutical industry owned by Novo Holdings and Cinven, was sold to EQT and Mubadala at an enterprise value of EUR 2.8 billion, generating an IRR of 28.9%.

Principal Investment Portfolio by sub-sectors, end of 2022



Principal Investments Portfolio 2018–2022





Ritedose is a leading sterile pharmaceutical manufacturer,
specialising in the use of blow-fill-seal technology.
The company was acquired by Novo Holdings in 2022.
Photo: Ritedose

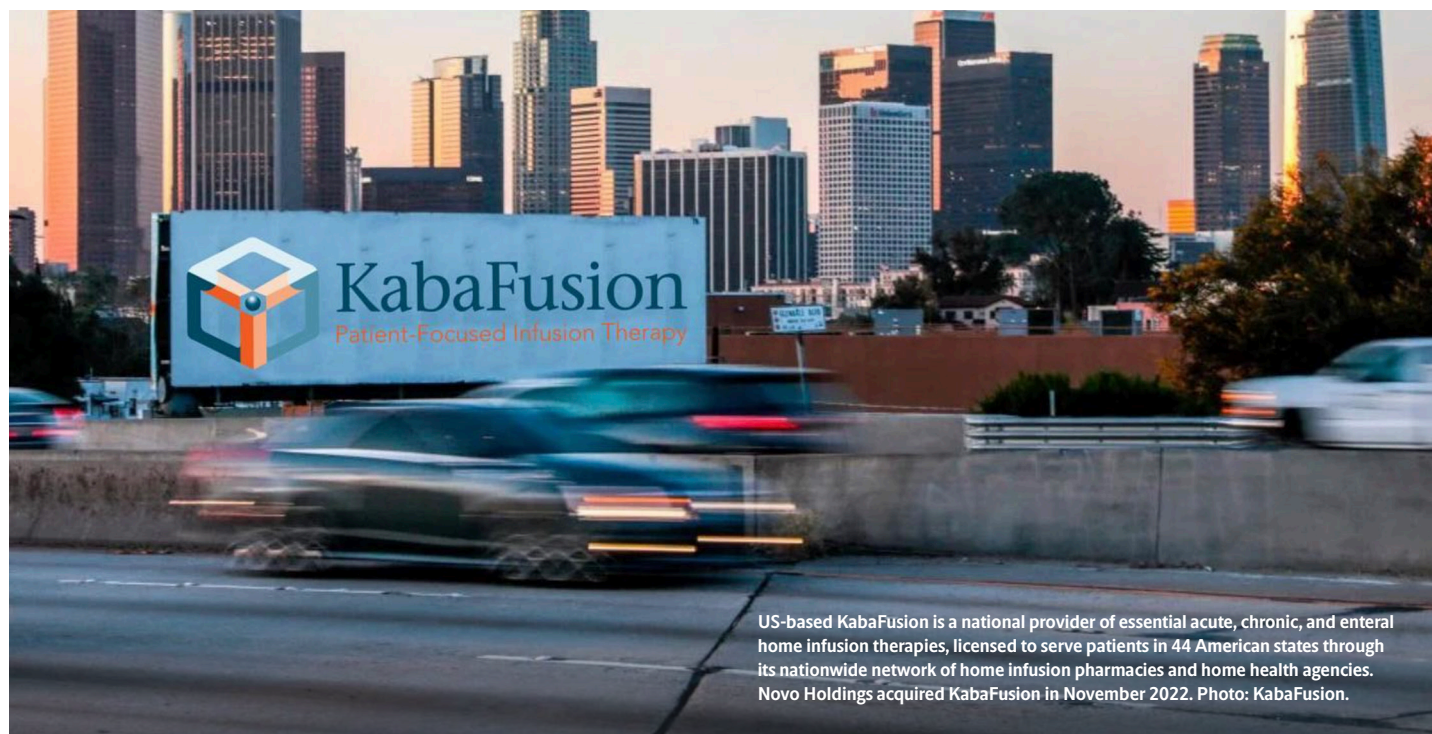
Principal Investments

A productive year despite challenging macro-economic backdrop

With DKK 13 bn deployed into investments, several successful exits and +10 new team members across Europe and the US, Principal Investments was able to maintain a high pace of activity in 2022, while managing a challenging macro-economic environment.

“Although the macro-economic environment had a dampening effect on deal flow, especially in the second half of the year, we remained busy on the investment front,” says Christoffer Søderberg, Managing Partner, Principal Investments. “We deployed a total of DKK 9 bn in equity across three new private US control deals, and into a handful of listed investments (a combined DKK 4 bn) taking advantage of the public market downturn. We also executed on exits, including the divestment of Swedish company Envirotainer to EQT and Mubadala, following a four-year successful journey with the company.”

At the Boston office, where the US division of Principal Investments is based, we were busy adding to the team, managing the current portfolio and completing three new investments. KabaFusion, a home infusion pharmacy company, was acquired just before the year drew to a close. This investment, says Abhijeet Lele, Senior Partner, and Head of Principal Investments US, marks an expansion of Principal Investments’ sector focus: “In the US, we have branched out from pharma services, where we have been very active, to healthcare IT (Availity, acquired in 2021) and to innovative provider models with KabaFusion, which focuses on improving



US-based KabaFusion is a national provider of essential acute, chronic, and enteral home infusion therapies, licensed to serve patients in 44 American states through its nationwide network of home infusion pharmacies and home health agencies. Novo Holdings acquired KabaFusion in November 2022. Photo: KabaFusion.

patient outcomes and reducing costs by moving services out of hospitals and into the home.”

A robust portfolio

In 2020 and 2021, the team put significant effort into engaging with various constituents to build the profile of Principal Investments in the US. “Principal Investments is now at a more mature stage and is becoming widely recognised as an active and dedicated US life science investor,” says Jonathan Levy, Senior Partner, Principal Investments US, adding:

“We now have a portfolio of sizeable assets. As a result, much of our activity in 2022 has been focused on our portfolio companies. At the board level we have been preparing for a potential recession, but 2022 has been a good year for the portfolio, and our assets have been performing in line with or ahead of expectations.”

Although the macro-economic turmoil is unlikely to ease in 2023, Abhijeet Lele is cautiously optimistic that the US Principal Investments portfolio is well equipped to tackle another challenging year, mainly because the products and services the portfolio’s life science companies offer are generally regarded as essential. Altasciences, a Canadian Contract Research Organisation (CRO), which was acquired in 2021, is one such example:

“Altasciences is regarded as the provider of choice for emerging biotechs, and since pre-clinical testing is an essential step in drug development, we see the company continuing to gain share in that market, despite a challenging biotech funding environment,” Abhijeet Lele says.

Christoffer Soderberg agrees that despite the significant financial market volatility, 2022 underlined the robustness of the life science portfolio: “Our strategic focus on life sciences and our approach to backing strong management teams of leading companies have served us well in these volatile times. Our portfolio is navigating the storm of geopolitical tensions, supply chain disruption, inflationary pressures, and rising interest rates, and remains fundamentally sound and robust from an underlying business performance perspective,” Christoffer Soderberg says and concludes:

“Our deal activity in the US during 2022 is a strong testimony that our strategic decision of establishing a direct presence in the US was the right one and our office in Boston is now fully operational.”

Principal Investments US acquisitions in 2022

Senior Partners Jonathan Levy and Abhijeet Lele share their insights and reflections of the three US control deals completed in 2022.

medicalknowledgegroup^{u.c}

“**Medical Knowledge Group (MKG)** is focused on serving biopharmaceutical companies, leveraging data and analytics to strategically market products to healthcare providers. This is a business segment that is growing very rapidly, and MKG is growing faster than the market. Our investment in MKG is the result of our spending several years looking for a platform in this segment, and MKG stood out as having distinctive capabilities,” Abhijeet Lele says.

RITEDOSE

“**Ritedose** is a pharmaceutical contract manufacturer specialising in blow-fill-seal technology. Ritedose has also leveraged its platform to develop its own portfolio of pharmaceutical products and expand into 503B compounding*. Similar to the investment in MKG, the acquisition of Ritedose was the result of a targeted sector approach, where we surveyed the contract manufacturing segment to identify the most attractive and actionable opportunities,” Jonathan Levy says.

KabaFusion

Patient-focused Infusion Therapy

“**KabaFusion** is a home infusion company that serves patients by sending nurses to patients’ homes, helping them administer drugs that need to be infused. In doing so, the company reduces stress on the overly burdened US healthcare system. Home infusion is cheaper than having infusion in a hospital and results in a much better medical outcome for the patients. The experience, clinical sophistication and specialisation of KabaFusion is very valuable – they fully understand the ins and outs of how different drugs are used and are able to help patients and doctors navigate the reimbursement landscape,” Jonathan Levy says.

*The FDA has designated 503B compounding pharmacies as those with outsourcing facilities that may manufacture large batches with or without prescriptions to be sold to healthcare facilities for office use only. These pharmacies are allowed to use larger batches to lower their manufacturing costs, passing the savings onto consumers. Source: www.thefdagroup.com

Growth Investments

Operating out of San Francisco, Growth Investments invests in scalable, high-growth life science companies at the leading edge of innovation.

Growth Investments has a thematic approach to investing, focusing on specific investment ecosystems within four industry areas: life sciences tools and diagnostics, technology within life sciences, complex manufacturing and supply chain, and life sciences beyond human health.

The mission of the Growth Investments team is to help its portfolio companies achieve their long-term potential. This mission is enabled by its flexible investment horizon, ability to deploy significant capital, and its engaged ownership model. Growth Investments leverages its scientific knowledge, operational expertise and global network to support its portfolio companies. In addition to its direct investment efforts, the Growth Investments team deploys capital with selected external fund managers to act as accelerators of its core strategy.

Growth Investments' portfolio companies are based in the US, Europe, and the Asia Pacific region where it works in close collaboration with Novo Holdings' Asia investment team.

Year in review

During 2022, Growth Investments dedicated its efforts towards helping its portfolio companies navigate market uncertainties and strengthen cash positions so management teams could focus on progressing their commercial goals.

At the end of the year, the Growth Investments portfolio comprised minority positions in 26 companies, 14 of which are based in the US, 7 in Europe and 5 in the Asia Pacific region. Two companies within its portfolio are publicly traded while the remainder are private.

The value of our Growth Investments portfolio was DKK 8 billion at the end of 2022, slightly higher than by the end of 2021, including limited partnership positions in external fund managers.

Investments and financings

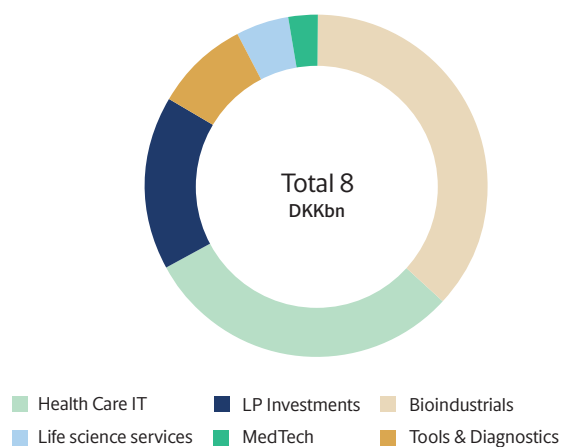
Growth Investments executed 4 investments and 8 follow-on investments during 2022, deploying DKK 2 billion. Significant investments include:

- MycoWorks, which closed a USD 125 million series C financing.
- Biomason, which closed a USD 65 million series C financing.
- Vestaron, which closed a USD 92 million series C financing.
- Co-leading of Invetx's USD 60.5 million series B financing.
- Mission Bio, which closed its USD 75 million series D financing.
- Leading of Kate Farms' USD 75 million series C financing.
- Expansion of ownership in Oxford Biomedica.

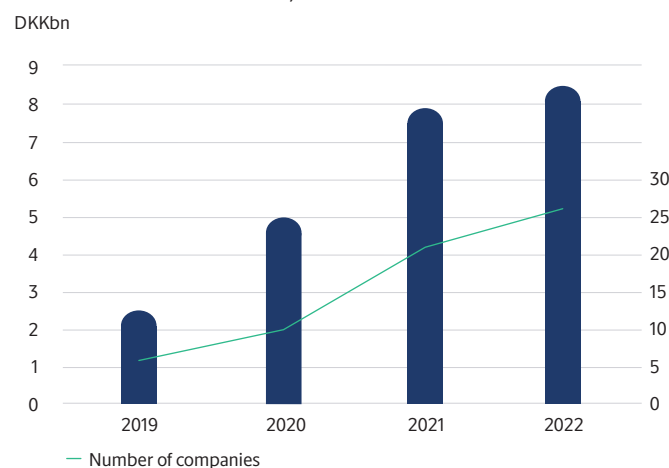
Exits and IPOs

We received distributions of DKK 506 million in 2022 from our external manager positions.

Growth Investments Portfolio by sub-sectors, end of 2022



Growth Investments Portfolio, 2019-2022



Venture Investments

Venture Investments is one of the largest and most active international life science venture investors with a track record of over 20 years of investing in novel technologies. Our Venture Investments portfolio includes both private and publicly traded investments in the biotech, medtech and digital health sectors, and spans early-stage, translatable science through to commercial stage companies. Novo Holdings’ evergreen structure enables Venture Investments to take a long-term view to advance science and medicine for the benefit of society.

Venture Investments operates globally with teams based in San Francisco, Boston, London and Copenhagen, with additional support from Novo Holdings’ Asia investment team in Singapore.

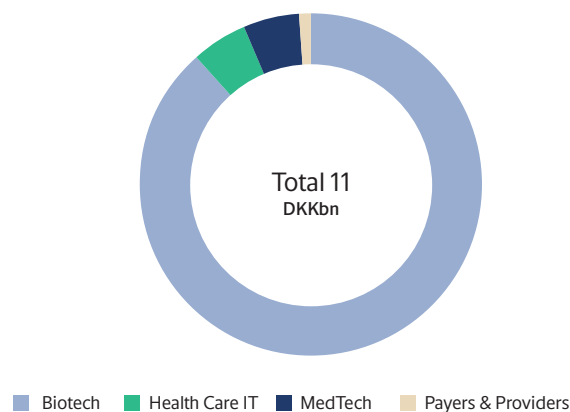
Year in review

Market volatility made 2022 a challenging year. Venture Investments provided a stabilising foundation against these headwinds for its portfolio companies. Clinical milestones include:

- Verve Therapeutics dosed its first patient with its gene editing product for the treatment of a genetic form of atherosclerotic cardiovascular disease.
- Edgewise Therapeutics announced positive Phase 2 interim results in adults with Becker Muscular Dystrophy.
- VectivBio reported positive interim clinical data from a Phase 2 study in Short Bowel Syndrome with Intestinal Failure Patients with Colon-In- Continuity.
- Arcellx announced positive clinical data from its ongoing CAR-T study in relapsed/refractory multiple myeloma.

At the end of 2022, the Venture Investments portfolio was valued at DKK 11.2 billion compared to DKK 12.8 billion in 2021. The portfolio included

Venture Investments Portfolio by sub-sectors, end of 2022



54 companies, of which 57% were public and 43% private. Based on geography, 81% of the portfolio value was in US-based companies with the remainder being European and Asian companies.

Investments and financings

Venture Investments executed 38 investments during 2022, deploying DKK 3 billion. Notable transactions include:

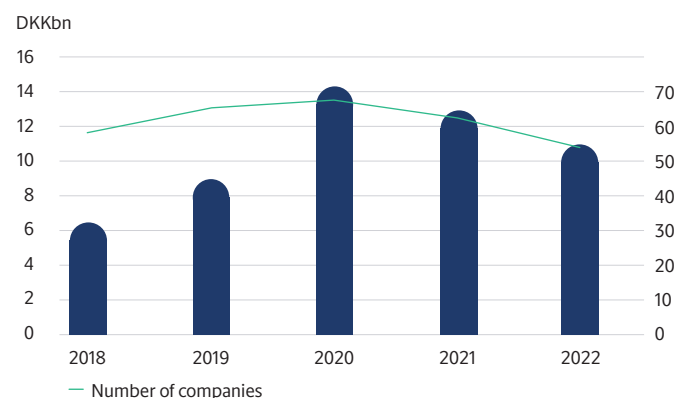
- Nuvig Therapeutics, Inc. closed a USD 47 million series A financing.
- Rondo Therapeutics closed a USD 67 million series A financing.
- F2G Ltd entered into a collaboration with Shionogi & Co Ltd with an upfront payment of USD 100 million and additional milestone payments of up to USD 380 million. Later in the year F2G announced a USD 70 million financing.
- Disc Medicine and Gemini Therapeutics announced a merger agreement to create a NASDAQ-listed, clinical-stage biopharma company.
- Verve Therapeutics closed a follow-on public offering, raising USD 259 million.

Exits and IPOs

During the year, Venture Investments helped Arcellx execute an Initial Public Offering (IPO). Later in the year Arcellx completed a follow-on offering, raising over USD 270 million in total in the public capital markets in 2022. Venture Investments realised DKK 3 billion from the sale of publicly traded stock and portfolio companies, including:

- Reviral Ltd was acquired by Pfizer for up to USD 525 million in total deal value.
- Checkmate Pharmaceuticals was acquired by Regeneron for all cash consideration of USD 250 million.
- Zogenix was acquired by UCB for a total transaction value of up to USD 1.9 billion.

Venture Investments Portfolio 2018–2022



Seed Investments

Based in Denmark, Seed Investments is an early-stage and company creation investor. Its ambition is to incubate, build and invest in breakthrough life science companies.

Seed Investments proactively collaborates with innovators globally and takes the lead in building and investing in early-stage start-ups in the Nordic region. Its Entrepreneurs in Residence, offering strong management competencies, along with our Seed Investments industry expertise and expert networks, guide a company to achieve significant milestones and successful commercial development. In addition to core investments in biotech and bioindustrials, Seed Investments invests in selected funds and operates the REPAIR (Replenishing and Enabling the Pipeline for Anti-infective Resistance) Impact Fund.

Year in review

By year end, our Seed Investments portfolio consisted of 40 companies, including 3 new companies launched in 2022. The portfolio largely consists of private investments, valued at DKK 3 billion at the end of 2022, slightly higher than by end of 2021. The REPAIR Impact Fund was valued at DKK 317 million, compared to DKK 309 million at the end of 2021.

Investments and financings

The following were among the notable transactions during 2022:

- Seed Investments was one of the cornerstone investors in Sound Bioventures Fund I in the first financing of EUR 110 million. One third of the funds will be invested in Scandinavian companies.
- Seed Investments launched Breye Therapeutics.

- Engimmune Therapeutics completed a EUR 15 million seed financing round.
- Precirix closed a EUR 80 million series B financing round.
- 21st Bio completed a series A financing with the first tranche of a EUR 86 million investment.
- The Bill & Melinda Gates Foundation committed to investing USD 5 million in Bactolife, a Novo Holdings portfolio company.

Exits

This has been a significant year for exits, with the divestment of two portfolio companies:

- Syndesi Therapeutics was acquired by AbbVie with a total deal value of up to USD 1 billion and USD 130 million upfront.
- BioPhero ApS was acquired by FMC Corporation for approximately USD 200 million (see page 27).

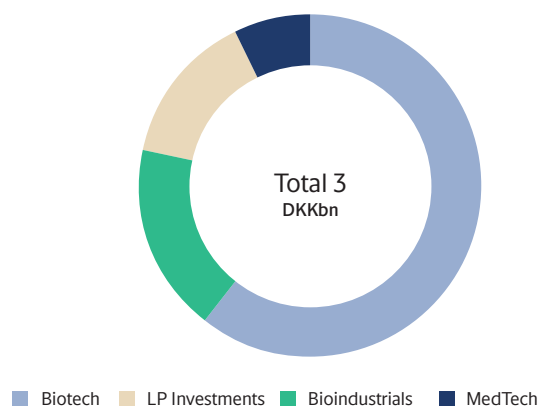
REPAIR Impact Fund

- Centauri Therapeutics Limited closed a USD 32 million series A financing.
- MinervaX was awarded PRIME status by the EMA and Fast Track from the FDA for its maternal vaccine for the prevention of adverse pregnancy outcomes and life-threatening infections caused by Group B streptococcus.

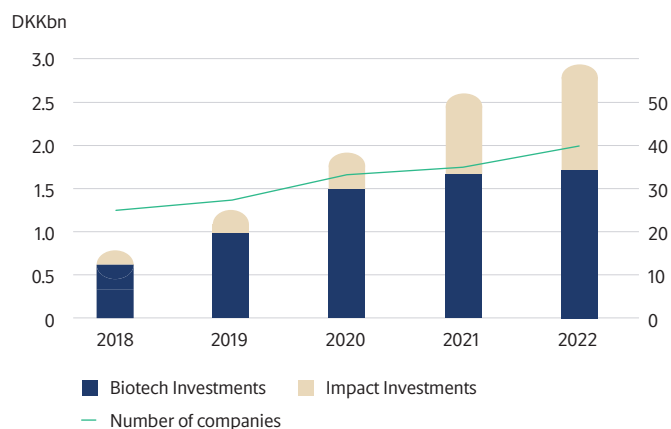
AMR Action Fund

The AMR Action Fund is the world's largest public-private partnership investing in clinical stage biotech companies that are developing antibiotics, antifungals and other antimicrobial treatments. The Fund made its first investments this year in Adaptive Phage Therapeutics and Venatorx Pharmaceuticals.

Seed Investments Portfolio by sub-sectors, end of 2022



Seed Investments Portfolio 2018–2022



BioPhero

From university spin-out to successful bioindustrial exit

In just a few years, BioPhero has evolved from idea to university spin-out, and onwards to become a valuable company entering the global market for sustainable crop protection. Novo Holdings incubated the company, and in June 2022 BioPhero was acquired by FMC Corporation, marking Novo Holdings' first bioindustrial exit.

Denmark-based BioPhero is a pioneer in producing insect pheromones used for insect pest control in agriculture. With a vision to make agriculture more sustainable, the technology platform enables pheromones to be applied in row crops at large scale for effective pest control, thus eliminating the need for using harmful pesticides. BioPhero has developed a highly efficient fermentation process for manufacturing pheromones at significantly lower costs and with fewer production steps compared with traditional chemical synthesis methods.

In 2014, the Novo Nordisk Foundation supported the early research behind BioPhero with an initial grant. Following a second grant two years later, Novo Holdings stepped in to help BioPhero spin out from the Novo Nordisk Foundation Center for Biosustainability at the Technical University of Denmark, and started taking shape as an independent company. However, additional commercial competences and capital were needed to help BioPhero scale up the business, says Thomas Grotkjær, Partner at Novo Holdings. Thomas has been managing the BioPhero asset from the first Novo Holdings-led seed investment round up until the company was acquired by FMC Corporation for approximately USD 200 million.

“Right from the start, we could see that this technology was ground-breaking, so our first challenge was building a strong syndicate of international investors who could support the company on its growth journey. It took around two years of incubation before the investment syndicate and industry experts were in place.”

A winning ticket

All early-stage investing implies a certain level of uncertainty, and BioPhero was no exception. Would the technology work? Was it scalable? And how would the market respond? Thankfully, the BioPhero investment was a winning ticket, predominantly because of the very strong, scalable science and the team that formed the backbone of the company.

“Professor Irina Borodina, who founded BioPhero, not only developed a very innovative scientific platform but she also managed to establish a solid patent portfolio,” says Thomas. “On top of this, the fermentation process was



more efficient than expected, which meant a shorter time to scale up, lower production costs and faster commercialisation.”

Even if the technology was better than expected, the market for sustainable crops was – and still is – modest and relatively immature. “We asked ourselves whether this technology would be embraced by the agricultural sector, but we launched the business at a favourable time when the demand for sustainable solutions was already there. Since then, the demand has been growing very rapidly,” explains Thomas Grotkjær.

The circle of life (science)

The BioPhero exit not only marks Novo Holdings' first bioindustrial exit but it also demonstrates how the priorities of Novo Holdings and the Novo Nordisk Foundation are creating meaningful synergies. The proceeds generated from the divestment to FMC Corporation is cascaded back to the Novo Nordisk Foundation and thus will be contributing to the grant-giving activities of the Foundation, which are guided by the purpose of improving people's health and the sustainability of society and the planet. In parallel, Novo Holdings will continuously be looking for new technologies and investments within the bioindustrial segment in the strong belief that biology will help to drive the green transition globally.

Capital Investments

Capital Investments operates out of Copenhagen with a global mandate, managing Novo Holdings' non-life science investments. In addition to generating attractive returns, Capital Investments provides diversification to the Novo Nordisk Foundation asset base, and allocates capital across three segments:

1. Public investments: stocks, credits and bonds.
2. Private equity: venture, growth and buy-outs.
3. Real assets: real estate, infrastructure and the green transition.

Approximately 51% of the portfolio is managed internally and 49% is managed by external managers.

Year in review

By the end of 2022, Capital Investments managed a total portfolio of DKK 83 billion (46% of the total Novo Holdings Investment Portfolio), compared to DKK 88 billion in 2021.

The Capital Investments portfolio generated a return of -6%, compared to 17% in 2021, and a profit of DKK -5 billion, compared to DKK 12 billion in 2021. Capital Investments outperformed its asset-class-weighted benchmark return of -14%.

Public investments

This has been a challenging year for the public markets, and rising interest

rates impacted our fixed income and equity portfolios. However, the public portfolio did better than the benchmark, primarily driven by a strong performance in our fixed income portfolio. This was partly due to good asset selection and partly due to higher exposure to floating rate securities. This was counter-balanced by the equity portfolio, which performed slightly below benchmark, mainly due to lack of exposure to the energy sector, which performed exceptionally well in 2022.

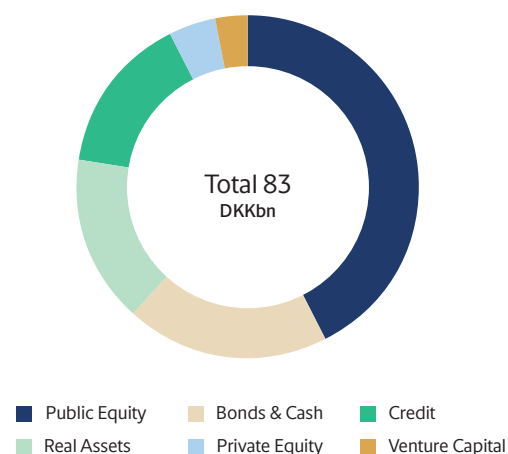
Private equity and real assets

The Capital Investments private equity portfolio had a positive performance in 2022. The positive result within the portfolio was mainly a result of our exposure to venture capital and a stronger US dollar against Danish kroner.

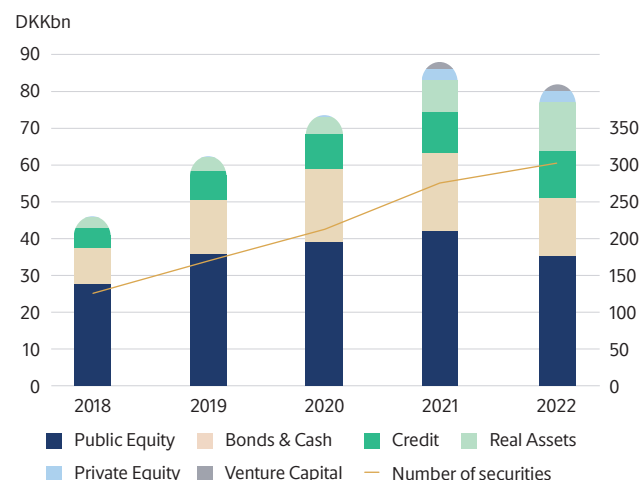
Capital Investments continued to expand its real estate portfolio during 2022, including increasing its stake in Dades, one of the largest real estate investment firms in Denmark.

Capital Investments committed EUR 700 million among 7 managers within Real Assets. A highlight was a EUR 265 million commitment to Glentra, a newly established infrastructure manager and an investment into 18 solar projects in Spain through our investment into Spanish Everwood Capital Fund V.

Capital Investments Portfolio by asset class, end of 2022



Capital Investments Portfolio 2018–2022



People and organisation

Organisational growth and globalisation

In line with our strategic direction, we continue to grow and globalise our efforts. Novo Holdings Investment Group* employed 152 people by the end of 2022 and has grown in staff by 36% since the end of last year. In 2022, we also further expanded our presence in Asia by the opening of our office in Shanghai, China.

As one of the world's leading investors in industrial biotechnology, we have decided to create a dedicated Bioindustrials Team, which will further expand in the coming years in order to fulfil Novo Holdings' ambitions within the sector.

Our culture is an important asset

Shaping and nurturing a unique company culture is an integrated part of our people strategy, and investing in our culture is a key factor to our success. We continuously work on alignment of our culture and values with our colleagues to ensure that our people always feel supported and valued in our organisation. Our workplace and the way we work are characterised by our ethos of high performance, respect and responsibility.

Attracting, developing and retaining high performing talent

Our people are our most important asset, and our ability to attract, develop and retain high performing talent is key to delivering strong results. We aim to offer a special and attractive employer value proposition, with a competitive compensation package and opportunities for continuous development and career advancement.

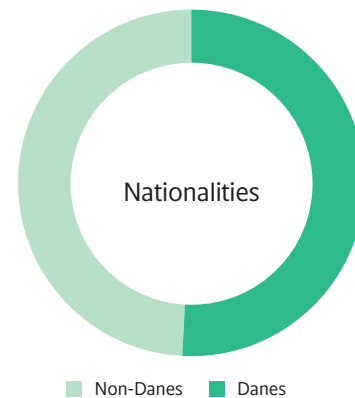
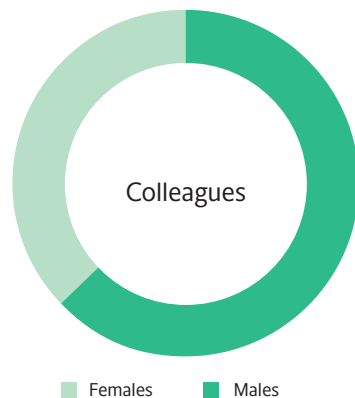
Through our learning programme – the Novo Academy – we strive to ensure that our colleagues are always at the forefront of their fields by offering them a broad range of targeted learning opportunities, e.g. business school programmes, board training and individual coaching. The development activities offered are continually expanded, based on the business and development needs of our employees.

To support high performance, we strive for diversity

Diversity and inclusion are closely linked to the core values of Novo Holdings, and it is our overall aim to create and sustain an environment that actively embraces diversity and inclusion. In 2022, we continued to increase diversity and inclusion at Novo Holdings, and several initiatives have again this year been taken in this regard, including structuring a more flexible workplace, events focusing on LGBTQ communities and events for female professionals.

Our colleagues represent 19 nationalities and comprise a wide range of experience and educational backgrounds. 36% of our colleagues are females and 64% are males, with a 15% female and 85% male gender split among management positions by the end of 2022**.

For our statements on corporate social responsibility and gender diversity cf. section 99a and 99b of the Danish Financial Statements Act, we refer to Annex A of the Novo Nordisk Foundation's (CVR: 10 58 29 89) Annual report: [Annual report](#)



*The Novo Holdings Investment Group consists of Novo Holdings A/S as well as the separate entities Novo Holdings Equity (US), Inc., USA, Novo Ventures (US), Inc., Novo Holdings Equity Asia Pte. Ltd., Singapore and Novo 1999 Advisory Shanghai Ltd., China providing certain consultancy services to Novo Holdings A/S.

** The numbers reflect our level 1, which comprises the Partner/Director level and above.

Novo Holdings CEO Life Science Summit

In October, Novo Holdings hosted its inaugural CEO Life Science Summit in Cape Cod, gathering close to 200 CEOs of Novo Holdings' portfolio companies, members of the Novo Holdings Senior Life Science Network and the investment partners of Novo Holdings.



The agenda comprised several keynote speeches, deliberately mixed with panel sessions designed to reflect some of the most critical currents in life sciences, while also offering ample time for portfolio CEOs to connect with peers, creating promising new synergies between the companies and introducing the Novo Holdings Life Science Network.

Lars Rebien Sørensen, Chair of Novo Holdings and the Novo Nordisk Foundation (photo), kicked off the event by sharing his perspectives on leadership and the values that epitomise the Novo Family. Specifically addressing the more recently included portfolio companies, Lars described the concept of the Enterprise Foundation model, which constitutes the structure of the Novo Group. “We are by statutes long-term investors, obliged to benefit society while still controlling our major enterprises,” Lars said. “At the Foundation and Novo Holdings, we are acutely aware of our responsibility, and you should be aware that by being associated with us, we will try to influence you and your companies to join us in creating a better world.”

Mads Krogsgaard Thomsen, CEO of the Novo Nordisk Foundation, dug deeper into the strategy of the Novo Nordisk Foundation, offering a vivid presentation of the priorities of the Foundation, many of which closely align

with those of Novo Holdings, and most of them having biotechnology as the common denominator.

Life Science Panels

Each of the four Summit Panel Sessions were curated to offer attendees new insights on some of the most pressing themes in life sciences for the moment – and for the future. “Bioindustrials”, Novo Holdings CEO Kasim Kutay said as he introduced the first panel session, “is a part of the Novo Holdings heritage, with major industry players, such as Novozymes, in our portfolio. Today, we have 23 bioindustrial companies in our portfolio, and many more will follow in the future,” Kasim noted before introducing the panel of industrial biotech experts for the Bioindustrials & the Green Transition Panel. The panel on Techbio – the convergence of technology and biotech – covered another topic that has caught the eye of the investment teams at Novo Holdings, driven by the conviction that this convergence will continue to accelerate innovation in the healthcare sector. With a strong focus on unmet patient needs and the excruciating burden of living with Alzheimer’s, the third panel offered a deep-dive into the challenges of finding a cure for Alzheimer’s, while the final panel discussed the complexity of – and how to navigate - the US healthcare payer system.

Building the network

The CEO Life Science Summit was the first time all CEOs of the portfolio were gathered under the same roof, marking the launch of the Novo Holdings Life Science Network. According to participants, meeting with their peers was time very well spent. New client relations, new partnerships and new peer-to-peer relations were established all across the portfolio.



CEO perspectives

Collaboration opportunities, new customer relations and valuable networking with peers were the main take-home experiences for the CEOs attending the Novo Holdings CEO Life Science Summit.



Prashant Warier, CEO, Qure.ai (India)

"I met several CEOs whose companies are likely to become new customers of qure.ai, but I also met with people whose companies could support us in conducting product studies and pricing strategies. Qure.ai is based in India, and I met some of the CEOs of the Novo Holdings Asia Portfolio with whom I had not connected before and with whom I definitely could see qure.ai collaborate as we develop our go-to-market approach. In short, I think that being part of the Novo Holdings Life Science Network is fostering a multitude of collaboration opportunities, and I am excited to develop the business relationships that were established at the Summit."



Sebastian Söderberg, CEO, Bactolife (Denmark)

"The Summit has provided a great opportunity to meet the CEOs of life science companies with similar challenges to Bactolife. Discussing these challenges – and opportunities – especially regarding development and upscaling was very fruitful, and I have met potential new collaboration and commercialisation partners. I was inspired by Novo Holdings' and the Novo Nordisk Foundation's shared ambition of having a positive and substantial impact on the world, such as fighting climate change and tackling some of the biggest global health issues, such as antimicrobial resistance. Collectively in the Novo Holdings Life Science Network we have a unique opportunity to make a real difference, as the returns we generate are invested in other promising companies or donated as grants to accelerate pioneering life science research."

Responsible Investments

At Novo Holdings, we aspire to be a leading responsible investor, recognised for delivering strong financial returns and positive societal impact.

Responsibility is core to our heritage. Novo Nordisk A/S was among the first companies in the world to have its values operationalised into action by using the Triple Bottom Line framework. This underpins the company's value creation by measuring its contribution to society and to the environment combined with traditional financial measures. This legacy also defines our approach as an investor.

Integrating societal impact and environmental, social and governance (ESG) aspects into our investment strategy, investment processes and engaged ownership activities enables us to make better investment decisions and improve returns. Our approach to Responsible Investments is guided by our Responsible Investments Policy and is underpinned by our commitment to the United Nations-supported Principles for Responsible Investment (PRI) and United Nations Global Compact.

Investing for positive change

As a life science investor, we have a unique opportunity to drive positive societal change by investing in companies that are addressing unmet needs or sustainability challenges through their products or services. Not only are these companies working for a common greater good, they also represent attractive investment opportunities.

Embedded in our investment strategy and strongly linked to our legacy, purpose and life science expertise, we are positioned to invest for positive societal impact within the following UN Sustainable Development Goals (SDGs):

3 GOOD HEALTH AND WELL-BEING



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



We cover the full continuum of life science investments, from company creation and investments in early-stage companies to investments in matured companies. Our healthcare investments and expertise support our focus to provide more people with better treatments and thereby improving health in society. We invest in innovative companies developing new or improved therapies or treatments and in companies contributing to increasing quality, improving efficiency or lowering costs for healthcare solutions.

Our increasing portfolio of investments within biosolutions emphasises the role of biotechnology as a driving force for the green transition of



Kate Farms, the market leader in plant-based clinical nutrition, was co-founded in 2012 by Richard and Michelle Laver, the parents of a girl, Kate, who since birth had been failing to thrive and whose own challenges with conventional diets and liquid nutrition spurred her parents to develop plant-based alternatives she could tolerate. Teddy Willis (picture) is one of Kate Farms' young customers. Novo Holdings invested in Kate Farms in 2022. Read more on page 33. Photo: Kate Farms.

industry and agriculture. It is widely documented that climate change and scarcity of natural resources have become among the greatest challenges the world faces. We invest in the potential we see within biosolutions, with the ambition to accelerate the impact of bioindustrial companies in solving global challenges.

Engaged ownership

At Novo Holdings, we support and advance the integration of ESG into the business practices of our portfolio companies, with the aim of future-proofing the businesses in which we invest. We do this by applying our ownership model to investments across our portfolio. Engaged ownership at Novo Holdings entails supporting and engaging with companies through our board positions, management dialogue and voting on business-critical ESG topics.

Evidently, we are accountable for our own business practices as long-term investors, but we are also responsible for the practices, conduct and actions of the companies in which we invest. Working proactively with our portfolio companies to set higher ESG standards is in our view essential to minimise risks and to realise the potential of our portfolio.

When working with ESG, we specifically give priority to UN SDG 8, 10 and 13, as these are closely in line with our values of Performance, Respect and Responsibility:

- UN SDG 8: Employee retention, engagement and workplace policies
- UN SDG 10: Increased diversity in senior management and boards of directors
- UN SDG 13: Initiatives to map and reduce climate impact

8 DECENT WORK AND ECONOMIC GROWTH



10 REDUCED INEQUALITIES



13 CLIMATE ACTION



During 2022, we have sourced ESG data points from our private and public portfolio companies. This has led to establishing an ESG baseline for our portfolio companies, which has enabled us to monitor progress and define the areas that deserve higher priority in the future. As of 2023, we will source ESG data annually and will disclose a separate Novo Holdings Responsible Investments report.

Investment highlights

qure.ai

In March 2022, Novo Holdings, HealthQuad and existing investor MassMutual Ventures made a USD 40 million investment in **Qure.ai**, one of the leading healthtech firms using artificial intelligence (AI) for medical imaging diagnostics. The funding will accelerate Qure.ai's global market expansion and intensify product development for critical care and community diagnostics with advanced technology that reads and interprets medical images such as X-rays, CT scans and ultrasounds in less than a minute, making equitable and high-quality healthcare a reality across the globe.

3 GOOD HEALTH AND WELL-BEING



katefarms®

In September 2022, Novo Holdings led the USD 75 million Series C financing in **Kate Farms**, the market leader in plant-based clinical nutrition. The proceeds from the Series C raise will allow Kate Farms to further its investments in advancing plant-based clinical nutrition research, product innovation and expansion into additional channels, all in an effort to enhance access to its high-quality, vital nutrition for those living with chronic illnesses and acute conditions. Founded in 2012, Kate Farms is now at the forefront of the rapidly expanding plant-based clinical nutrition segment.

3 GOOD HEALTH AND WELL-BEING



ROSILIN Technologies

In November 2022, Novo Holdings led the USD 11 million Series A financing in **Roslin Technologies Ltd.**, a food and agricultural technology company developing animal stem cells with the capacity to self-renew indefinitely and differentiate into desired end-tissues for meat. The company mission is to become the leading provider of animal cell lines to benefit the globally emerging cultivated meat sector and thereby addressing challenges such as greenhouse gas emissions and excessive use of water and antibiotics. The funding will allow the company to expand its portfolio of cell lines and further enable the scaling up of its cells into cost-competitive cell biomass for meat production.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Financial performance 2022 and outlook for 2023

Our Investment Portfolio was not immune from the market downturn of 2022. However, the portfolio demonstrated its resilience by performing well on a relative basis and beating benchmark. Our Investment Portfolio delivered a -6% return (vs. benchmark of -7%) during 2022, corresponding to returns of DKK -11 billion. Our 5- and 10-year trailing returns were 7% and 11%, respectively.

The first half of the year remained active in terms of private equity deal flow within Principal Investments, and generally we observed a high activity level across all Investment Teams. Combined, the private equity portfolio delivered a return of 8% in 2022 against benchmarks of 0%, with the most significant contributor being the exit of our position in Envirotainer, a global provider of services for the pharmaceutical industry, at an enterprise value of EUR 2.8 billion. Focusing on acquisitions, we deployed a total of DKK 17 billion into private equity during 2022, with the three control investments into Medical Knowledge Group, Ritedose Corporation and KabaFusion being the most significant (page 23).

Our public equity portfolio was challenged in line with the market. The portfolio's hardest hit stocks Evotec and Synlab declined 64% and 51% respectively and contributed to a -18% return against benchmark of -13%.

Our venture capital exposure delivered a return of -10% and below MSCI World Healthcare. This was driven by both the private and public venture capital portfolio.

The low interest rate environment of the past decade has abruptly ended along with the climate of monetary accommodation. Inevitably this has impacted our bond portfolio values with a negative -3% return but on a relative basis has performed well with benchmark returns of -5%.

Despite the overall market downturn there are a number of bright spots within the overall portfolio. Whilst the private portfolio valuations have contracted along with market multiples, the business fundamentals underwritten within investment base cases remain sound and in some instances are tracking strongly ahead of the base investments thesis. Additionally, the strategic decision to increase our exposure to real assets has proven to be well founded. The exposure to real assets has increased to 7% of the total Investment Portfolio and delivered a return of 22% at a

significant upside to the MSCI Europe Real Asset benchmark. Finally, we received record high income from the Novo Group companies of DKK 14 billion, derived from dividends and from participation in the share buy-back programme of the Novo Nordisk, such that the total income and investment return during the year amounted to DKK 3 billion.

As announced in January 2014, Novo Holdings has informed Novo Nordisk that it intends to consider its participation in the Novo Nordisk share repurchase programme on a case-by-case basis. In 2022, we participated in the share buy-back programme of Novo Nordisk, and through this recorded an income of DKK 7 billion in addition to dividend income of DKK 7 billion, together representing the recorded income of DKK 14 billion.

By the end of 2022, our Investment Portfolio and Total Investment Assets at market value are recorded at DKK 180 billion and DKK 805 billion, respectively, with total assets at market value representing the highest value for Novo Holdings since the inception of the company in 1999.

Development in costs and operating profit

As per our strategic direction and associated operating model, we continued to expand our organisation over the course of 2022, bringing the number of total employees for the group to 152 by the end of the year. Operating a people business, this development was a key driver in the development of our total costs, recorded at DKK 778 million in 2022, representing a 21% growth compared to 2021 and 0.43% of the Investment Portfolio by the end of 2022.

Aside the increase in employee costs, during 2022, we experienced increased travel activity relative to 2021 (still impacted by the Covid-19 crisis), and costs related to our activities in the US were negatively impacted by the appreciation of the US dollar against Danish kroner, as the US dollar appreciated by approximately 6%.

Income from the Novo Group companies and returns on our Investment Portfolio amounted to DKK 3 billion during 2022. Less costs of DKK 778 million, operating profit was realised at DKK 2 billion. As expected this is significantly below the record year 2021. However, in a relative context against the global market and our benchmarks, the operating profit for 2022 is satisfactory.

Total Investment Assets

DKKbn



We continue to develop the company by building in-house long-term sustainable competences, among other things by increasing our presence in Asia, and foresee increased deal-related activity. Thus we expect our operating costs for 2023 to grow at a higher level than observed in 2022, as we look to fully support our engaged ownership strategy.

Returns from the Investment Portfolio depend to a large extent on the development in the capital markets. Combined with the expected income from the Novo Group companies as described above, our expectations are to deliver positive income and return as well as operating profit in 2023, at a higher level than 2022 given the very unfavourable market development in 2022.

Including the Novo Nordisk Foundation's share of the joint Investment Portfolio, financial items and tax, net profit for the year amounted to DKK 7 billion.

Outlook for 2023

We continue to develop the business according to our strategic direction, providing increased diversification geographically and across asset classes. This diversification will continue to position the portfolio well given the continued global challenges and financial headwinds.

For 2023, Novo Holdings has informed Novo Nordisk that it plans to participate in its share buy-back programme. Novo Holdings currently intends to maintain its ownership of around 28% of Novo Nordisk's share capital. As stated in connection to the merger announcement between Novozymes and Chr. Hansen, Novo Holdings intends over time to maintain approximately 25.5% ownership in the combined company.








Business and financial risk

As a global multi-asset class investor, risks present themselves in many shapes and forms. They range from operational business risks associated with how we operate the company to financial risks associated with the strategic and tactical composition of the portfolio of assets under management.

Managing such risks in a systematic way is key in order for us to create and protect the values of Novo Holdings. To monitor and manage these risks, we apply a defined process for identifying, monitoring, mitigating and reporting risks. Risks are identified, assessed and sought mitigated through a dedicated process, led by Finance, with support from a dedicated Allocation and Risk Management Committee, investment areas as well as business support specialists.

A consolidated overview of risks is presented to the Board for approval once yearly as an integral part of the annual strategy review, applying scenario and risk-thinking exercises as part of our annual strategic planning process. These include analyses of market dynamics as well as socioeconomic and political developments that present risks or opportunities for our business. We complement the annual consolidated risk overview to the Board with quarterly updates on financial risks as well as ad hoc reporting on operational risks.

By the end of 2022, the following seven key business and financial risks have been identified (see details on page 37):

Risk	Potential impact		
	Value of Investment Portfolio	Monetary loss	Reputational
 Global recession	√		
 Capital market downturn	√		
 Life sciences sector downturn	√		
 Attraction and retention		√	
 Financial fraud and IT security breaches		√	√
 Legal risks		√	√
 Global expansion		√	√

On top of the general management of operational business risks, our continued global expansion has required increased attention to manage financial, legal and IT risks. We have successfully recruited four employees at senior level positions as well as twelve additional employees in our offices in Boston and San Francisco to mitigate operational and key person risks. Furthermore, we have managed to recruit a Head of China for our newly established office in Shanghai, ensuring robust local leadership to our China initiative within our Asia strategy.

The Allocation and Risk Management Committee, chaired by the CFO, is responsible for overseeing risk management of the assets under management from both a strategic and a tactical perspective. The Allocation and Risk Management Committee meets on a quarterly basis, supplemented with extraordinary meetings if required. During 2022, the discussions in the Allocation and Risk Management Committee have primarily been centered around (i) increased geopolitical risks, most notably implications related to the Russia-Ukraine war; (ii) the impact of extraordinarily high inflation levels and historically rapid increases in interest rates; (iii) the capital market downturn in June 2022, (iv) the strength of the USD; and (v) increased competition for private assets in our core markets.

Moving into 2023, we will maintain a strong focus on monitoring geopolitical and macro-economic risks, which to a greater extent than in the last four decades are driving capital markets and investment risks. Specifically, we will have an increased attention to the higher recession risk and associated capital market implications.

Statements on data ethics cf. section 99d of the Danish Financial Statements Act

To cope with the challenges that arise from the fast-moving technological development, along with evolving risks and benefits from large scale data use, Novo Holdings has developed a policy on how to use and handle data in an ethical way. The policy is based on five principles for how to handle data in an ethical way including the respect for the privacy of employees and prioritising of openness and transparency in the ongoing challenges that handling both personal data and non-identifiable data entails.

Read more in our [Policy on data ethic](#)

Global recession The risk of a global recession in 2023 has increased significantly, although consensus suggests a relatively mild recession. Our exposure towards the life sciences sector will likely provide for some resilience for the value of our Investment Portfolio and income from the Novo Group companies is expected to be only marginally impacted. In addition, we pursue mitigation through pre-defined risk tolerance levels, including high liquidity reserves.

Capital market downturn Despite the capital market downturn in 2022, the risk of another capital market downturn in 2023 remains relatively high, given current geopolitical and macro-economic risk levels. We pursue protection of the value of our Investment Portfolio through relatively high liquidity reserves and continued diversification of the Investment Portfolio.

Life sciences sector downturn We are deliberately highly exposed towards the life sciences sector through our ownership in the Novo Group companies and around 50% of the Investment Portfolio allocated to life sciences. However, we consider the risk of a life sciences sector downturn during 2023 as low.

Mitigating actions towards the value of our total assets includes diversification into different sub-sectors and companies as a means to seek different types of life science exposure. Further, we invest across the life science continuum and in different geographies, like we deliberately invest into innovative companies. Finally, relatively high liquidity reserves provide for some protection.

Attraction and retention risk Our people are our main asset and with a highly competitive talent market, attraction and retention remain a key operational risk factor. We consider our ability to attract and retain the right talent as business critical to our success, and inability to fill out critical roles with a specific set of capabilities or experience needed will likely jeopardise our business success. Attraction and retention of talent is monitored and discussed via our Remuneration Committee, the Nomination Committee and our yearly Organisational Review.

Financial fraud and IT security breaches As an asset manager, we rely on strong financial and IT processes as a foundation for efficient investment processes and asset management. Further, it is essential that these processes are robust and provide protection for potential external or internal fraud and cyber-attacks to avoid loss of capital or data, and to avoid disruption of our business.

Aside from the potential monetary loss caused by fraud or loss of data and business disruption in case of cyber-attacks, such events will damage the reputation of Novo Holdings as a professional and reliable business partner.

We continue strengthening our financial controls by building and documenting key processes and by employing dedicated resources to manage these. This includes automated payment processes as well as deploying callbacks to prevent fraudulent activities in our investment processes. Further, we continuously strengthen our IT security with a deliberate focus on IT behavior as well as infrastructure. In support of this, we conduct annual reviews and audits of our financial controls and our IT security efforts.

Legal risks Our investment and operational activities give rise to numerous potential legal risks, including – but not limited to – claims resulting from breach of contract, general litigation risk, directors' liability, breach of local law or regulations, fraud and criminal liability. We invest in companies located in many different jurisdictions and across a broad set of asset classes, which entails legal risks that, if not known, understood and mitigated, can lead to financial loss for Novo Holdings. Further, certain legal risks could also impact the reputation of Novo Holdings as a reliable, trusted and professional business partner.

We have implemented operating procedures in all key processes, supported by involvement of internal finance, legal and tax resources throughout the investment processes, supplemented by a thorough insurance programme.

Global expansion Several risks need to be managed in the context of our geographical expansion, including complexity related to tax and banking in the new business environment, as well as compliance risks, to avoid monetary loss for Novo Holdings, and impact to the reputation of Novo Holdings as a reliable, trusted and professional business partner. Further, our ability to attract and retain key employees can be at risk.

We carefully consider the regulatory environment to ensure compliance and a robust foundation for operation, building on knowledge from our network. In addition, we welcome new employees through a dedicated on-boarding programme, as a way of becoming familiar with our processes and culture.

Management review
Governance

Corporate governance

Corporate governance codes and practices

Compliance	Governance structure			Assurance
Danish and foreign laws and regulations	The Novo Nordisk Foundation			Audit of Annual Report
	Board of Directors			
Corporate governance standards	The Chairs	Nomination Committee	Remuneration Committee	
	Executive Management			Internal controls
	Leadership Team			
Novo Holdings Way	Organisation			

Shareholder

Novo Holdings is a holding and investment company wholly owned by the Novo Nordisk Foundation and established in 1999 for the purpose of managing the assets of the Novo Nordisk Foundation.

The Chairs

The Chairs consist of the Chair and the Vice Chair, both of whom are elected directly by the shareholder at the general meetings. At the Annual General Meeting in 2022, Lars Rebien Sørensen was re-elected as Chair and Steen Riisgaard was reelected as Vice Chair. The Chairs assist the Board of Directors in the planning of Board meetings, employment of Executive Management and other assignments as decided by the Board.

Nomination Committee

The Nomination Committee is a board committee mandated by Novo Holdings' Board to oversee the composition of the boards of directors in the key companies in Novo Holdings' Investment Portfolio, and to review and endorse board succession candidates for board members nominated by Novo Holdings to serve on these boards.

The Nomination Committee is appointed by Novo Holdings' Board and consists of Chair Lars Rebien Sørensen and Vice Chair Steen Riisgaard. During 2022, the Nomination Committee focused particularly on the desired competences to be represented on the boards of key companies within the Novo Holdings Investment Portfolio and reviewed and discussed the long-term succession planning related to these.

Remuneration Committee

The Remuneration Committee is a board committee mandated by Novo Holdings' Board and assists the board with oversight of the remuneration policy as well as the actual remuneration of board members, board committees, Executive Management and Leadership Team.

The Remuneration Committee is appointed by the Board and consists of Chair Lars Rebien Sørensen, Vice Chair Steen Riisgaard and Board member Viviane Monges.

In 2022, the Remuneration Committee focused particularly on reviewing structure and levels of our remuneration framework, adjustments to base salary including a responsible approach to inflation, the short-term bonus programmes and the long-term incentive programmes.

Assurance

The Financial Statements in the Annual Report are audited by an independent audit firm elected at the Annual General Meeting. As a part of their audit they evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management. Furthermore, they obtain an understanding of the internal controls relevant to the audit.

Board of Directors and Leadership Team

Board of Directors

The Board of Directors oversees and guides Novo Holdings in realising its purpose of improving people's health and the sustainability of society and the planet.

The Board of Directors sets the strategic direction, decides on key priorities, including organisational development and budget allocation, approves specific investment proposals and is responsible for the overall risk management

of Novo Holdings. During 2022, the Board of Directors met five times with a participation rate of 97%, against 99% in 2021. Elected once annually at the Annual General Meeting, the Board of Directors is comprised of eight members, including the Chair and the Vice Chair, and represents a broad range of relevant industry, investment and life science capabilities.



Lars Rebie Sørensen, Chair

Year joined Board: 2017

Education

MSc in Forestry from the Copenhagen Royal Veterinary and Agricultural University and BSc in International Economics from Copenhagen Business School.

Background

Lars Rebie Sørensen has over 35 years of general management experience in the pharmaceutical industry. He joined the Novozymes A/S (then Novo Nordisk A/S, Enzymes Division) Marketing team in 1982. Over the years he held various global positions across the Middle East and the United States. In 1994, he was appointed a member of the corporate management team and assumed responsibility for the Novozymes A/S Healthcare Business. In November 2000, he became President and CEO of Novo Nordisk A/S, a position he held until December 2016.

Board positions and other management duties

- Chair of the Board, Novo Nordisk Foundation, Denmark
- Executive Chair of the Board, Ferring Pharmaceuticals, Switzerland
- Chair of the Advisory Board, Axcel Management A/S, Denmark
- Board Member, Thermo Fischer Scientific Inc., United States
- Board Member, Essity AB, Sweden
- Board Member, Jungbunzlauer Suisse AG, Switzerland
- Adjunct Professor, the University of Copenhagen's School of Life Sciences (appointed in 2007)
- Adjunct Professor, the Center for Corporate Governance at Copenhagen Business School (appointed in 2018)



Steen Riisgaard, Vice Chair

Year joined Board: 2013

Education

MSc in Microbiology from the University of Copenhagen. He is a Research Fellow at Statens Serum Institute (SSI) and a Research Microbiologist at Foss Electric, Denmark.

Steen Riisgaard has over 35 years of experience in industrial biotechnology. He joined the Novozymes A/S (then Novo Nordisk A/S, Enzymes Division) Research & Development team in 1979. In 1982, he moved to Tokyo to start up a new Enzymes Research & Development unit in the Novo Nordisk subsidiary, Novo Industry Japan Ltd. He returned to Denmark in 1985 and held a number of different positions in the company until 1989 when he was promoted to Corporate Executive Vice President of the Enzymes Business. In 2000, Steen Riisgaard became the President and CEO of Novozymes A/S, from the demerger from Novo Nordisk A/S, and served in that position until April 2013.

- Board Member, Novo Nordisk Foundation, Denmark
- Chair of the Board, New Xellia Group A/S, Denmark
- Chair of the Board, Lactobio A/S, Denmark
- Vice Chair of the Board, Villum Foundation, Denmark
- Board Member, Corbion N.V., the Netherlands



Francis Cuss,
Board member,

Year joined Board:
2017

Education

BA in Natural Sciences, MB, BChir and MA from Cambridge University. He is a Fellow of the Royal College of Physicians and of the Faculty of Pharmaceutical Medicine

Background

Francis Cuss has over 35 years of clinical experience across the pharmaceutical industry. In 1986 he started at GlaxoSmithKline plc (then Glaxo Inc.), UK and United States, as a Director in Pulmonary Clinical Research. From 1989, Francis Cuss worked at the Schering-Plough Research Institute where he held several positions in Discovery and Development, eventually becoming Senior Vice President of Early Clinical Research & Experimental Medicine. Francis Cuss joined Bristol-Myers Squibb Research & Development in 2003, first working as Senior Vice President of Discovery and later as Senior Vice President for all of Research and Early Development. In 2010, he joined the company's senior management team. In 2013, he was appointed Executive Vice President, Chief Scientific Officer and Head of Research & Development at Bristol-Myers Squibb Company, retiring in 2017.

Board positions and other management duties

- Chair and Board Member, the Board of Trustees for Montclair State University in New Jersey, United States
- Board Member, Rubius Therapeutics Inc., United States
- Board Member, Glympse Bio, United States



Viviane Monges,
Board member,

Year joined Board:
2018

Education

MBA, Ecole Supérieure de Commerce de Paris

Viviane Monges has over 30 years of financial management experience predominantly in the pharmaceutical industry. She joined Wyeth Pharmaceuticals Inc. in 1997 and held several leadership roles, including CFO of the Europe Region unit and CFO of the Global Pharma Business unit. From 2006 to 2010, She was with Novartis A/G as Europe CFO and then as Global Division CFO of the OTC Division. In 2010, she joined Galderma S.A., a multinational dermatology company as Group CFO, which was later acquired by Nestlé S.A. Then from 2015 to 2018 she served as CFO of the Nestlé Business Excellence Division. Since then, she has been serving on the boards of several health care companies, including Chair of EUROAPI.

- Chair of the Board, EUROAPI, France
- Board Member and Member of the Audit Committee, Union Chimique Belge Biopharmaceutical Company S.A. (UCB), Belgium
- Board Member and Chair of the Audit Committee, ADC Therapeutics, Switzerland
- Board Member and Chair of the Audit Committee, Pharvaris, the Netherlands



Britt Meelby Jensen,
Board member,

Year joined Board:
2022

Education

MSc in International Marketing and Management from Copenhagen Business School in Denmark and furthermore received an MBA from Solvay Business School (Université Libre de Bruxelles) in Brussels.

Between 2000-2002, Britt Meelby Jensen worked as a Management Consultant in McKinsey & Company. She joined Novo Nordisk A/S in 2002 where she held several leadership roles, including being Corporate Vice President of Global Marketing, Market Access & Commercial Excellence. In 2013, Britt was appointed CEO of Dako A/S, a global cancer diagnostics company owned by Agilent Inc. From 2015-2019, she was President and CEO of the Danish public biotech company, Zealand Pharma A/S, where the company was listed on Nasdaq in the US. From 2019-2022, she served as CEO of Swedish Medtech company, Atos Medical AB, owned by PAI partners, however, in connection with selling the company to Coloplast, Britt decided to step down from her role and continued as an advisor. In May 2022, she was appointed as CEO of Ambu A/S where she has served as Board member since 2019.

- CEO, Ambu A/S, Denmark
- Advisor, Novo Holdings A/S Advisory Group (NAG), Denmark.
- Board Member, Hempel Foundation and Hempel Invest A/S, Denmark



Jeppe Christiansen,
Board member

Year joined
Board: 2009

Education

MSc in Economics from the University of Copenhagen.

Background

Jeppe Christiansen has over 35 years of experience in fund and investment management across the financial industry. From 1986 to 1988, Jeppe Christiansen worked as an economist in Sparekassen SDS. He joined LD Pensions in 1988 where he became Head of Fund Management and later transitioned to Executive Vice President, responsible for investments. From 1998 to 2004, Jeppe Christiansen was Executive Director in Danske Bank with responsibility for group equity business and corporate international banking. From 2004 and until 1 April 2009, he was CEO of Lønmodtagernes Dyrtdisfond (LD). In 2005, Jeppe Christiansen established Maj Invest and has been CEO of the Maj Invest group since the establishment.

Board positions and other management duties

- CEO, Maj Invest Holding A/S and Executive Director in two wholly owned subsidiaries, Denmark
- Chair of the Board, Haldor Topsøe A/S, Denmark
- Chair of the Board, EMLIKA Holding ApS, and two wholly owned subsidiaries of the latter company, Denmark
- Chair of the Board, JEKC Holding ApS, Denmark
- Board Member and Chair of the Remuneration Committee, Novo Nordisk A/S, Denmark
- Board Member, KIRKBI A/S, United Shipping & Trading Company, Pluto Naturfonden, Randers Regnskov, Denmark
- Board Member, BellaBeat Inc., United States
- Member of the Board of Governors, Det Kgl. Vajsenhus, Denmark
- Adjunct Professor of Finance, Copenhagen Business School, Denmark



Jean-Luc Butel,
Board member

Year joined
Board: 2017

Education

BA in International Affairs from George Washington University and an MBA in International Management from Thunderbird's School of Global Management.

Jean-Luc Butel has over 35 years of international business development experience across the healthcare industry. He joined Johnson & Johnson Medical in 1984. In 1991, he joined Becton Dickinson & Company as President Japan and then became President Worldwide Consumer Healthcare. From 1999 to 2003, Jean-Luc Butel was President of Johnson & Johnson Independence Technology (IT). He joined Medtronic in 2003, where he served as Senior Vice President and was later appointed Executive Vice President and President, International. In 2012, Jean-Luc Butel joined Baxter International Inc. as the Corporate Vice President and President, International. From 2015 to 2017, he was a Senior Advisor for McKinsey & Company's Healthcare Systems & Services.

- Advisor, Novo Holdings A/S Advisory Group (NAG), Denmark.
- Board Member and Member of the Nominating Committee, Takeda Pharmaceutical Co. Ltd, Japan
- Board Member, Rani therapeutics, United States
- Board Member, Jana Care, United States
- Board Member, DxD Hub Singapore, Chair Health Evaluation Committee



Henrik Poulsen,
Board member,

Year joined
Board: 2021

Education

MSc in Finance & Accounting and BSc in International Business from Aarhus School of Business, Denmark.

In the period 1999-2006, Henrik Poulsen held various executive roles with LEGO rising to become Executive Vice President of Markets & Products. From 2007-2008, Henrik Poulsen served as Operating Executive of Kohlberg Kravis Roberts & Co. in the UK. In 2008, Henrik Poulsen was appointed as CEO and President of the Danish telecommunication company TDC Group. In 2012-2020, Henrik Poulsen served as CEO and President of Ørsted A/S, a global leader in renewable energy.

- Chair of the Board, Faerch A/S and Faerch Group Holdings A/S, Denmark
- Chair of the Board, Chair of the Nomination Committee and Member of the Remuneration Committee, Carlsberg A/S, Denmark
- Chair of the Board, Carlsberg Breweries A/S, Denmark
- Vice Chair of the Board, and Member of the Audit and Remuneration Committee, Novo Nordisk A/S, Denmark
- Supervisory Board Member, Bertelsmann SE & Co. KGaA, Germany
- Senior Advisor, A.P. Møller Holding, Denmark

Executive Management and Leadership Team

Executive management consist of the CEO and CFO. The Leadership Team of Novo Holdings is composed of the CEO, the CFO, the Managing Partners of the Investment Areas as well as the Head of People & Organisation and the General Counsel.

The Leadership Team provides leadership across the organisation in support of the overall direction set by the Board of Directors. Executive Management is responsible for the daily management of Novo Holdings' operations and provides recommendations to the Board of Directors with respect to investments, strategic direction, organisational development and financial planning.



Kasim Kutay, CEO

- With Novo Holdings since 2016
- 25 years of investment banking experience focused on the healthcare sector, with 7 years at Moelis & Company and 18 years at Morgan Stanley



Petrina Knowles Gjelstrup, SVP, People and Organisation

- With Novo Holdings since 2019
- 18 years of experience in HR in international companies such as A.P. Møller-Mærsk, Carlsberg, TDC and Danske Bank



Nigel Govett, CFO

- With Novo Holdings since 2022
- 22 years of investment banking and private equity experience, including Oman Investment Fund and EQT



Morten Beck Jørgensen, Managing Partner, Novo Capital Investors

- With Novo Holdings since 2005
- 25 years of investment experience including Nordea Markets and Novo Nordisk



Christoffer Søderberg, Managing Partner, Principal Investments

- With Novo Holdings since 2016
- Background in consulting (BCG) focusing on private equity clients and investment banking (Carnegie). Also spent a handful of years in the industry working with strategy, M&A and as CFO



Søren Møller, Managing Partner, Novo Seeds

- With Novo Holdings since 2011
- Before this, Søren was Global Manager of Bioinformatics and Genomics at Novozymes, CSO and VP of R&D at Exiqon and a research scientist at Novo Nordisk



Scott A. Beardsley, Managing Partner, Novo Ventures

- With Novo Holdings since 2009
- 20 years of investment banking experience including 14 years focused on life sciences with JP Morgan, Piper Jaffray and Montgomery Securities



Barbara Fiorini Due, General Counsel

- With Novo Holdings since 2020
- 23 years of corporate and M&A legal experience from Genmab, ISS World Services and the law firm of Plesner



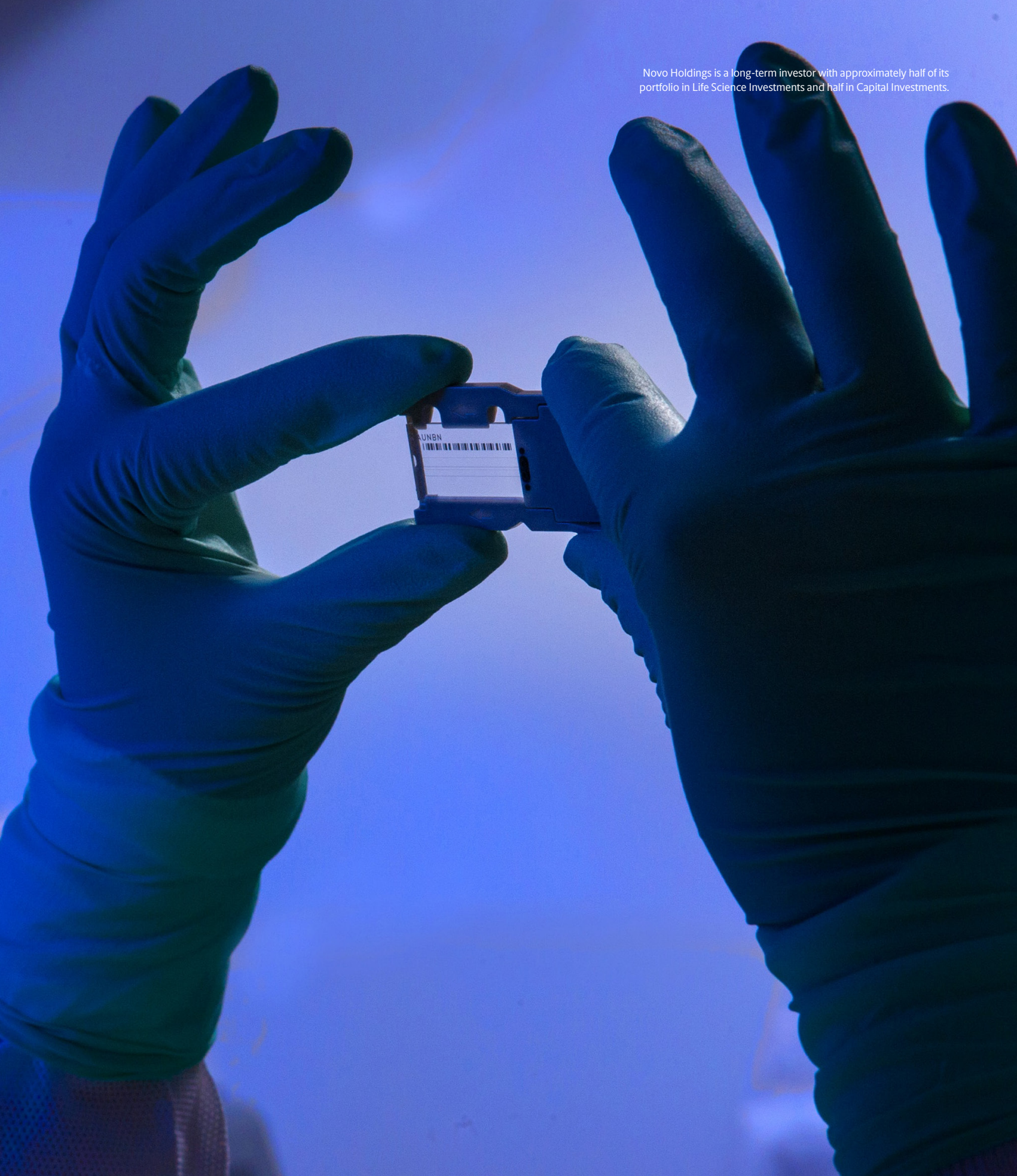
Robert Ghenchev, Managing Partner, Novo Growth

- With Novo Holdings since 2018
- 11 years of investment banking experience with Moells & Company and Deutsche Bank focused on life sciences as well as corporate merges & acquisitions

Statements

Financial statements

Novo Holdings is a long-term investor with approximately half of its portfolio in Life Science Investments and half in Capital Investments.



Statement of comprehensive income

Year-end 31 December			
DKK million	Note	2022	2021
Income from Novo Group companies	2.1	14,551	13,505
Return from Life Science Investments	2.2	-6,392	11,610
Return from Capital Investments	2.2	-5,044	12,278
Total income and investment return		3,115	37,393
Costs	2.3, 2.4	-778	-643
Operating profit		2,337	36,750
Novo Nordisk Foundation's share of return of joint Investment Portfolio		2,997	-3,432
Financial income		67	27
Financial expenses		-101	-18
Profit before tax		5,300	33,327
Income taxes	2.5	1,342	0
Net profit for the year		6,642	33,327
Other comprehensive income		0	0
Total comprehensive income		6,642	33,327

Balance sheet

Year-end 31 December			
DKK million	Note	2022	2021
Assets			
Novo Group companies	3.2	3,322	3,339
Life Science Investments	4.1, 4.2	97,699	94,523
Capital Investments	4.1, 4.2	83,128	88,084
Property		436	444
Total non-current assets		184,585	186,390
Investments pending settlement		361	319
Tax receivables		602	33
Other receivables		289	320
Cash at bank		411	190
Total current assets		1,663	862
Total assets		186,248	187,252
Equity and liabilities			
Share capital	3.1	500	500
Retained earnings		126,803	158,161
Total equity		127,303	158,661
Amounts owed to group companies	3.3	22,644	0
Total non-current liabilities		22,644	0
Real estate debt		248	248
Amounts owed to group companies	3.3	7,400	0
Joint Investment Portfolio, Novo Nordisk Foundation		26,657	27,291
Trade payables		138	154
Tax payables		0	11
Investments pending settlement		1,629	684
Capital Investments liabilities	4.1, 4.2	10	10
Other liabilities		67	60
Other provisions	5.2	152	133
Total current liabilities		36,301	28,591
Total liabilities		58,945	28,591
Total equity and liabilities		186,248	187,252

Equity statement

Year-end 31 December

DKK million	Share capital	Retained earnings	Total
2021			
Equity at the beginning of the year	500	130,834	131,334
Net profit for the year	-	33,327	33,327
Dividends paid during the year	-	-6,000	-6,000
Equity at the end of the year	500	158,161	158,661
2022			
Equity at the beginning of the year	500	158,161	158,661
Net profit for the year	-	6,642	6,642
Dividends paid during the year	-	-38,000	-38,000
Equity at the end of the year	500	126,803	127,303

Cash flow statement

1 January to 31 December

DKK million	2022	2021
Dividends received, Novo Group companies	7,603	6,526
Proceeds from sale of shares in Novo Group companies	6,982	7,034
Investments in Novo Group companies	-17	0
Divestments of Life Science Investments	9,242	8,563
Investments in Life Science Investments	-19,398	-14,401
Dividends received, Life Science Investments	480	570
Divestments of Capital Investments	65,701	40,450
Investments in Capital Investments	-65,537	-43,809
Dividends received, Capital Investments	183	152
Interest received, Capital Investments	480	417
Financial items	53	-51
Investments in property	-1	-3
Operating expenses paid	-790	-539
Paid corporation tax	859	-85
Net cash from operating activities	5,840	4,824
Cash flows from financing activities		
Dividends paid to Novo Nordisk Foundation	-8,000	-6,000
Contribution from the Novo Nordisk Foundation to the joint Investment Portfolio	8,000	6,000
Repayments to the Novo Nordisk Foundation from the joint Investment Portfolio	-5,619	-4,970
Net cash from financing activities	-5,619	-4,970
Net cash flow	221	-146
Cash and cash equivalents at the beginning of the year	190	336
Cash and cash equivalents at the end of the year	411	190



Sustainability is integral to our business and we invest in companies, that apply biotechnology to drive the green transition forward.

Notes to the financial statement

1. Basis of preparation

- 1.1 General accounting policies
- 1.2 Significant accounting estimates and judgements
- 1.3 Changes in accounting policies and disclosures
- 1.4 New standards and interpretations not yet implemented

2. Results for the year

- 2.1 Income from Novo Group companies
- 2.2 Return from Investment Portfolio
- 2.3 Employee costs
- 2.4 Costs per area
- 2.5 Income tax

3. Capital structure

- 3.1 Share capital
- 3.2 Investments in Novo Group companies

4. Investment Portfolio

- 4.1 Life Science Investments and Capital Investments
- 4.2 Financial instruments and financial risk management

5. Remuneration

- 5.1 Remuneration to the Board of Directors
- 5.2 Long-term incentive programme

6. Other disclosures

- 6.1 Contractual obligations
- 6.2 Events after the balance sheet date
- 6.3 Financial definitions
- 6.4 Related parties
- 6.5 Group companies

1. Basis of preparation

1.1 General accounting policies

Basis of preparation

The separate financial statements for Novo Holdings included in this Annual Report have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and additional requirements of the Danish Financial Statements Act for reporting class C enterprises (Large).

The financial statements are presented in DKK million, unless otherwise stated.

Principal accounting policies

Novo Holdings' accounting policies are described in each of the individual notes to the financial statements. Accounting policies listed in the table below are regarded as the principal policies applied by the Management.

Note	Area
3.2	Investments in Novo Group companies
4.1	Life Science Investments and Capital Investments

Applying materiality

The financial statements are a result of processing large numbers of transactions and aggregating those transactions into classes according to their nature or function. The transactions are presented in classes of similar items in the financial statements. If a line item is not individually material, it is aggregated with other items of a similar nature in the financial statements or in the notes. There are substantial disclosure requirements throughout IFRS. Management provides specific disclosures required by IFRS, unless the information is not applicable or considered immaterial to the economic decision-making of the users of these financial statements.

Translation of foreign currencies

The financial statements are presented in Danish kroner (DKK), which is the company's functional currency and presentation currency.

Transactions in foreign currencies are translated into the functional currency at the exchange rates prevailing on the transaction dates. Foreign exchange gains and losses on completion of these transactions and on the translation of monetary assets and liabilities in foreign currencies to the exchange rates prevailing on the balance sheet date are recognised in the statement of comprehensive income.

Exchange rate differences arising on the translation of non-monetary items, such as other Capital Investments at fair value recognised in the statement of comprehensive income, are recognised as part of the gain or loss on fair value adjustments.

1.2 Significant accounting estimates and judgements

The preparation of financial statements in conformity with generally accepted accounting principles requires Management to make estimates and assumptions that can have a significant effect on the application of policies and reported amounts of assets, liabilities, income, expenses and related disclosures.

Management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about the reported carrying amounts of assets and liabilities and the reported amounts of revenues and expenses that may not be readily apparent from other sources. Actual results could differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Changes in estimates may be necessary if there are changes in the circumstances on which the estimate was based, or more detailed information becomes available. Such changes are recognised in the period in which the estimate is revised.

The application of the company's accounting policies may require Management to make judgements that can have a significant effect on the amounts recognised in the financial statement. Management's judgement is required in particular when assessing the substance of transactions that have a complicated structure or legal form.

The significant accounting estimates and judgements can potentially significantly impact the separate financial statement.

Novo Holdings believes the following to be the significant accounting estimates and related judgements used in the preparation of its financial statement:

Note	Significant accounting estimates and judgements
4.1	Fair value measurement and valuation of unquoted investments

Please refer to the specific note for further information on the key accounting estimates and judgements as well as assumptions applied.

Financial assets and liabilities

Financial assets and liabilities measured at fair value can be categorised using the fair value measurement hierarchy.

Depending on purpose, Investments are classified into the following categories:

- Financial assets at fair value through the income statement
- Financial assets at amortised cost

Management determines the classification of its financial assets on initial recognition and re-evaluates this at the end of every reporting period to the extent that such a classification is required.

Recognition and measurement

Purchases and sales of financial assets are recognised on the settlement date. These are initially recognised at fair value.

Fair value disclosures are made separately for each class of financial instruments at the end of the reporting period.

Financial assets are removed from the balance sheet when the rights to receive cash flows have expired or have been transferred, and Novo Holdings has transferred substantially all the risks and rewards of ownership.

Financial assets 'at fair value through the income statement'

Financial assets at fair value through the income statement consist of investments and forward exchange contracts. Equity investments are included in investments assets.

Net gains and losses arising from changes in the fair value of financial assets are recognised in the income statement as income from investments.

The fair values of quoted investments are based on current bid prices at the end of the reporting period. Financial assets for which no active market exists are carried at fair value based on a valuation methodology.

Financial assets 'at amortised cost'

Financial assets at amortised cost are cash at bank and non-derivative financial assets solely with payments of principal and interest.

If collection is expected within one year (or in the normal operating cycle of the business, if longer), they are classified as current assets. If not, they are presented as non-current assets.

Other receivables are recognised initially at fair value. Subsequently, they are measured at amortised cost using the effective interest method, less allowance for doubtful receivables.

Financial liabilities 'at amortised cost'

Financial liabilities at amortised cost consist of bank overdrafts, trade payables and other liabilities.

The Joint Investment Portfolio is measured at fair value by using the cash flows from the underlying assets in the portfolio. The underlying assets in the portfolio are measured at fair value.

1.3 Changes in accounting policies and disclosures

No changes have been made to the principal accounting policies, and the policies have been applied consistently to all the years presented.

Line items for Financial income and Financial expenses have been added in the Statement of comprehensive income. Comparative figures have been adjusted.

1.4 New standards and interpretations not yet implemented

The company has adopted all new and amended standards and interpretations issued by IASB and endorsed by the EU effective as of 1 January 2022. The application of new and amended accounting standards has not had material impact on the Financial Statements in 2022 and no future periods from the adoption of these new IFRS's are anticipated. It is the management's assessment that the above-mentioned changes in accounting standards and interpretations will not have any significant impact on the financial statements upon adoption of these standards.

2. Results for the year

This section provides information related to the company's operating profit and tax to help the reader get a deeper understanding of the company's performance in 2022.

2.1 Income from Novo Group companies

DKK million	2022	2021
Dividends received from Novo Nordisk A/S	7,207	6,144
Dividends received from Novozymes A/S	396	382
Gain from sale of shares in Novo Nordisk A/S	6,948	6,649
Gain from sale of shares in Novozymes A/S	0	330
Total income for the year	14,551	13,505

Accounting policy

Dividends and realised gains are included in 'Income from Novo Group companies' in the statement of comprehensive income.

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2.2 Return from Investment Portfolio

Accounting policy

Realised and unrealised gains and losses on fair value adjustments are recognised in the statement of comprehensive income in the financial year in which they arise. Realised gains and losses on sale of financial assets are calculated on the basis of the original purchase price. Purchase and sale of investments are recognised on the trade date.

Dividend income from financial assets at fair value through profit or loss is recognised in the statement of comprehensive income within 'Return from Life Science Investments' / 'Return from Capital Investments' when the right to receive payments is established.

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DKK million	2022			2021		
	Life Science Investments	Capital Investments	Total	Life Science Investments	Capital Investments	Total
Realised gain and return for the year, net	3,026	1,932	4,958	8,487	4,638	13,125
Appreciation to fair value, net	-9,418	-6,976	-16,394	3,123	7,640	10,763
Total investment result for the year	-6,392	-5,044	-11,436	11,610	12,278	23,888

2.3 Employee costs

DKK million	2022	2021
Wages and salaries	184	179
Long-term incentives	87	94
Pension costs, defined contribution plans	19	19
Other employee costs	7	12
Total employee costs	297	304
<i>Allocation of employee costs by category:</i>		
Life Science Investments	153	175
Capital Investments	42	35
Administration & management	102	94
Total employee costs	297	304
<i>Hereof remuneration to Executive Management:</i>		
Salaries and short-term incentives	18	19
Long-term incentives	21	14
Pension	1	1
Total remuneration to Executive Management	40	34
Average number of full-time employees (no.)	93	89

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Accounting policy

Wages, salaries, social security contributions, paid annual leave and sick leave, bonuses, and non-monetary benefits are recognised in the year in which the employees render the associated services. Where the company provides long-term employee benefits, the costs are accrued to match the rendering of the services.

Since 2017, long-term incentive programmes (LTIP) have been agreed for all employees subject to them meeting certain targets. The LTIP is a capped programme measured against specific and pre-defined hurdles.

2.4 Costs per area

DKK million	2022	2021
Costs regarding Life Science Investments	482	418
Costs regarding Capital Investments	47	30
Administration & management	249	195
Total costs for the year	778	643

Pursuant to section 96 (3) of the Danish Financial Statement Act information about the Auditor's fee is stated in the consolidated financial statements of Novo Nordisk Fonden.

2.5 Income taxes

DKK million	2022	2021
Computation of effective tax rate		
Statutory tax rate	22.0%	22.0%
Non-taxable income less non-deductible expenses	-47.3%	-17.2%
Deduction in accordance with the transparency rule	0.0%	-4.8%
Effective tax rate	-25.3%	0.0%

When assessing Danish corporation tax, Novo Holdings and all Danish subsidiaries are taxed jointly.

Novo Holdings is acting as the administrative company of the joint taxation. The Danish group companies are jointly liable for corporation tax on the consolidated taxable income.

The taxable income for Novo Holdings mainly consists of the returns on financial investments which were negative in 2022.

The income tax paid for the Danish tax group in the current year was DKK 8,872 million (DKK 9,802 million in 2021). There have been some adjustments to prior years which predominantly driven by tax payments

regarding tax disputes and reversal of the associated tax liability. The adjustments to prior years tax received at an amount of DKK 15 million (DKK 338 million in 2021).

The total costs consists of employee costs of DKK 297 million (2021: DKK 304 million) and external costs of DKK 481 million (2021: DKK 339 million). For more information in relation to employee costs, please refer to note 2.3.

Total costs including results from Novo Holdings operating entities Novo Ventures (US), Inc., Novo Holdings Equity (US), Inc., Novo Holdings Equity Asia Pte. Ltd. and Novo 1999 Advisory Shanghai Ltd. are DKK 756 million (2021: DKK 625 million).

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Accounting policy

Corporation taxes in the statement of comprehensive income include tax payable for the year.

Tax payable/receivable includes tax payable computed on the basis of the expected taxable income for the year and any adjustment for tax payable for previous years.

Novo Holdings is covered by the tax rules concerning compulsory joint taxation, due to which the company is jointly taxed with its Danish subsidiaries. Corporation tax is allocated between profit-making and loss-making Danish companies in ratio to their taxable income. Provision is made for tax using the full allocation method. However, Novo Holdings applies the tax transparency rules and distributes its taxable income to the Novo Nordisk Foundation when the taxable income is positive.

3. Capital structure

3.1 Share capital

Share capital	No.	Nominal value DKK million
A share capital (shares of DKK 1)	115,400,000	115
B share capital (shares of DKK 1)	384,600,000	385
Total share capital as of 31 December	500,000,000	500

Any share amount of DKK 1 of the A share capital carries 10 votes, while any share amount of DKK 1 of the B share capital carries 1 vote.

There have been no changes in the share capital during the last 5 years.

Proposed distribution of profit	2022	2021
Proposed dividend	0	1,800
Retained earnings	6,642	31,527
	6,642	33,327

Paid ordinary dividend per share equals DKK 3.60 (2021: DKK 12.00)

Paid extraordinary dividend per share equals DKK 72.40 (2021: DKK 0)

3.2 Investments in Novo Group companies

DKK million	2022	2021
Costs at the beginning of the year	3,339	3,393
Additions during the year	17	0
Disposals during the year	-34	-54
Carrying amount at the end of the year	3,322	3,339

The Novo Group companies are valued at historical costs.

3.3 Amounts owed to group companies

DKK million	2022	2021
Contractual undiscounted cash flows		
Within a year	7,400	0
More than 5 years	32,072	0
Total	39,472	0
Carrying amount at the end of the year	30,044	0

Accounting policy

Dividends are recognised as a liability in the period in which they are declared at the Annual General Meeting.

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Accounting policy

Investments in the category 'Novo Group companies' are defined as being the directly owned shares in Novo Nordisk A/S and Novozymes A/S. Investments in Novo Group companies are included in the financial statements at cost. If cost exceeds the recoverable amount, the carrying amount is written down to recoverable amount.

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In connection with an extraordinary dividend of DKK 30,000 million, Novo Holdings has entered into a loan agreement with the Novo Nordisk Foundation. The interest rate on the loan is fixed at 3.5% and interest is accrued to the principal amount on an annual basis. The loan is to be repaid in December 2032 at the latest. DKK 7,400 million of the amount is expected to be repaid to the Novo Nordisk Foundation in 2023. The loan can be extended by the Novo Nordisk Foundation. As the loan agreement was entered into in December 2022, the fair value of loan is expected to equal the carrying amount at the end of the year.

4. Investment Portfolio

4.1 Life Science Investments and Capital Investments

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Accounting policy

Life Science Investments are defined as direct or indirect investments in financial assets that are primarily related to either healthcare or bioindustrial segments and which do not meet the definition of investments in Novo Group companies. Investments that do not meet the definition of any of the above two categories are defined as Capital Investments.

Subsidiaries, associates and other financial assets that fall into the category of either Life Science or Capital Investments are recognised in accordance with IFRS9 at fair value through profit or loss. Investments are initially recognised at fair value and subsequently adjusted to fair value.

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Significant accounting estimates and judgements

Life Science Investments and Capital Investments are valued at fair value. By nature, uncertainties exist regarding fair value assessment of investments not based on observable market data. Consequently, preparation of the financial statements requires the application of certain estimates and judgements.

The material area of estimation or judgement for each of the applied valuation approaches is set out below:

Valuation approach	Valuation methodology	Estimation and assumptions	Value DKK million 2022	Value DKK million 2021
Income-based approaches	Discounted cash flows	Cash flows and discount rates	24,497	19,241
Market-based approaches	Trading multiples	Selection of comparable companies, trading multiples, sales and profit forecast	16,258	14,084
Value trigger approach	Relative adjustments based on pre-defined value triggers	Relative adjustment to previous valuation	6,262	4,546
Financing round approach	Price at recent financing round	N/A	3,976	3,784
LP approach	Adjusted reported NAV	Latest reported NAV adjusted for capital calls, capital returns and pricing development (if relevant)	23,284	18,249
Cost approach	Cost at recent transaction	N/A	7,124	4,860
Total			81,401	64,764

Management reviews and assesses the value of the individual investments on an ongoing basis with specific and planned reviews of the total Investment Portfolio on a quarterly basis.

The discount rates used range from 5% to 14% whereas the EV/EBITDA multiples are in the range from 15x to 20x. These ranges should be seen as a result of our diversified investment portfolio.

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Accounting policy

Fair value is the price that would be received by selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Novo Holdings has implemented fair value guidelines and procedures which ensure a consistent fair value measurement of each individual investment over time. Moreover, the fair value guidelines provide a framework for reasonable, consistent and transparent selection of valuation methodologies for valuing the investments. The selection criteria are in line with the value hierarchy in IFRS 13.

DKK million	2022			2021		
	Life Science Investments	Capital Investments	Total	Life Science Investments	Capital Investments	Total
Cost at the beginning of the year	63,072	63,764	126,836	49,226	56,901	106,127
Additions during the year, net	12,594	2,020	14,614	13,846	6,863	20,709
Cost at the end of the year	75,666	65,784	141,450	63,072	63,764	126,836
Value adjustments at the beginning of the year	31,451	24,310	55,761	28,328	16,670	44,998
Appreciation to fair value, net	-9,418	-6,976	-16,394	3,123	7,640	10,763
Value adjustments at the end of the year	22,033	17,334	39,367	31,451	24,310	55,761
Fair value at the end of the year	97,699	83,118	180,817	94,523	88,074	182,597
Hereof investment assets	97,699	83,128	180,827	94,523	88,084	182,607
Hereof investments with negative value	0	-10	-10	0	-10	-10

Fair value estimation*Hierarchy of fair value inputs*

Investments measured at fair value are classified according to a fair value hierarchy depending on the inputs used in the valuation method. The fair value hierarchy distinguishes between observable and unobservable inputs, which are classified at one of the following levels:

- Level 1 – Unadjusted quoted market prices for identical assets in an active market.
- Level 2 - Inputs, other than quoted market prices included within Level 1, which are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices). Quoted prices for similar assets are level 2 inputs.
- Level 3 – Inputs for the asset that are not based on observable market data.

Securities traded on active markets are classified at level 1. Securities traded on inactive markets are generally classified at level 2. Securities in private unlisted operating companies are generally classified at level 3.

Investments in private investment companies are classified at level 2 or level 3, depending on the nature of their investment portfolios, their ability to liquidate their underlying investments and any other restrictions on the disposition of the investments. If the investment can be redeemed at the reported net asset value on the measurement date or in the near future, the investment is classified at level 2. Otherwise the investment is classified at level 3.

Policy for determining when transfers between levels are deemed to have occurred

Transfers to level 3 occur when quoted market prices (level 1) or other observable inputs (level 2) are no longer available. Transfers out of level 3 occur if quoted market prices (level 1) or other observable inputs (level 2) become available (e.g. when a private company goes public through an IPO, equity investments in the company transfers from level 3 to level 1 as the shares can be valued using the quoted market price (level 1)).

Valuation methods and input

The general principle applied in the selection of valuation approach maximises the use of observable inputs and minimises the use of unobservable inputs.

If a security trades in an active market, the closing price is applied. An active market is defined as one in which transactions for the security occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Should a security not trade in an active market, it is initially booked and held at cost in the first twelve months succeeding the investment, unless any material events occur within this timeframe. Beyond the twelve months window, the valuation methodology follows the following hierarchy:

When independent broker quotes representing contemporaneous trades exist, these will be applied in estimating the fair value of the security.

If a portfolio company has carried out any financing rounds within the last twelve months and the pricing in the financing round is likely to represent a fair value, the fair value estimate is based on the price obtained in the financing round.

If neither independent broker quotes nor pricing from financing rounds are available, the fair value will be based on application of a modelling approach, which again follows a strict hierarchy:

1. If the company runs an established business with an identifiable stream of continuing earnings or cash flows that are considered to be maintainable, and it is possible to identify comparable companies in terms of risk attributes and earnings growth prospects, the fair value shall be based on application of the market approach (i.e. relevant multiples based on a set of comparable companies);
2. If no comparable companies in terms of risk attributes and earnings growth prospects can be identified, the fair value shall be based on application of an income approach (i.e. a discounted cash flow model);
3. If the company does not run an established business with an identifiable stream of continuing earnings or cash flows that are considered to be maintainable, the fair value shall be based on a value trigger approach, by which the fair value changes based on the occurrence of value triggering events.

Fair value measurement by hierarchy

DKK million	31 December 2022			Total
	Level 1	Level 2	Level 3	
Life Science Investments				
Public Equity	32,645	0	0	32,645
Private Equity	0	0	49,290	49,290
Venture Capital	4,287	0	9,772	14,059
Credit	0	0	1,705	1,705
Total Life Science Investments	36,932	0	60,767	97,699
Capital Investments				
Public Equity	29,290	5,599	0	34,989
Private Equity	19	0	3,602	3,621
Venture Capital	0	0	2,364	2,364
Credit	4,259	6,141	1,792	12,192
Real Assets	0	0	12,876	12,876
Bonds	11,797	5,279	0	17,076
Total Capital Investments	45,465	17,019	20,634	83,118
Total investments	82,397	17,019	81,401	180,817

Change in value in 2022 not based on observable market data (level 3):

Asset class	At the beginning of the year	Additions during the year	Disposals during the year	Change in hierarchy due to investments that completed an IPO during the year	Gains through profit or loss*	Total
Private Equity	41,910	12,032	-4,815	-170	3,935	52,892
Venture Capital	11,771	3,363	-1,255	-928	-815	12,136
Credit	2,687	686	-77	0	201	3,497
Real Assets	8,396	2,573	-95	0	2,002	12,876
Total Investments at fair value	64,764	18,654	-6,242	-1,098	5,323	81,401

*Of this amount, DKK 2,042 million relates to unrealised gains and losses on investments held at year-end 2022, compared to DKK 10,753 million year-end 2021.

Fair value measurement by hierarchy

DKK million	31 December 2021			Total
	Level 1	Level 2	Level 3	
Life Science Investments				
Public Equity	38,632	0	0	38,632
Private Equity	0	0	39,061	39,061
Venture Capital	5,046	0	10,299	15,345
Credit	0	0	1,485	1,485
Total Life Science Investments	43,678	0	50,845	94,523
Capital Investments				
Public Equity	37,144	4,624	0	41,768
Private Equity	50	0	2,849	2,899
Venture Capital	0	0	1,472	1,472
Credit	3,744	6,294	1,202	11,240
Real Assets	0	0	8,396	8,396
Bonds	14,120	8,179	0	22,299
Total Capital Investments	55,058	19,097	13,919	88,074
Total investments	98,736	19,097	64,764	182,597

Change in value in 2021 not based on observable market data (level 3):

Asset class	At the beginning of the year	Additions during the year	Disposals during the year	Change in hierarchy due to investments that completed an IPO during the year	Gains through profit or loss*	Total
Private Equity	29,005	11,315	-1,367	-7,662	10,619	41,910
Venture Capital	8,067	3,991	-2,560	-2,663	4,936	11,771
Credit	1,934	652	-173	0	274	2,687
Real Assets	4,494	2,031	-11	0	1,882	8,396
Total Investments at fair value	43,500	17,989	-4,111	-10,325	17,711	64,764

*Of this amount, DKK 10,753 million relates to unrealised gains and losses on investments held at year-end 2021, compared to DKK 2,023 million year-end 2020.

The following table details the applied valuation methods for determination of fair value for each asset class:

Asset class	Valuation methodology used	Unobservable input used	Sensitivity in fair value in case of changes in unobservable input
Public Equity	<ul style="list-style-type: none"> Closing prices according to exchange markets Estimated market price based on observable input* 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Private Equity (direct)	<ul style="list-style-type: none"> Discounted cash flows Trading multiples Cost at recent transaction 	<ul style="list-style-type: none"> Cash flows and discount rates Trading multiples Cost at recent transaction 	<ul style="list-style-type: none"> If trading multiples decreased by 10%, the fair value would decrease by DKK 2,870 million (2021: DKK 2,014 million) If the WACC increased by 0.25pp, the fair value would decrease by DKK 601 million (2021: DKK 603 million)
Private Equity (LP)	<ul style="list-style-type: none"> Adjusted reported NAV 	<ul style="list-style-type: none"> Latest reported NAV adjusted for capital calls, capital returns and pricing development (if relevant) 	<ul style="list-style-type: none"> N/A
Venture Capital (Public)	<ul style="list-style-type: none"> Closing prices according to exchange markets 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Venture Capital (Private – direct)	<ul style="list-style-type: none"> Discounted cash flows Trading multiples Relative adjustment based on pre-defined value triggers Cost at recent transaction Financing round 	<ul style="list-style-type: none"> Cash flows and discount rates Trading multiples Value trigger assumptions Cost at recent transaction Price at financing round 	<ul style="list-style-type: none"> If trading multiples decreased by 10%, the fair value would decrease by DKK 17 million (2021: DKK 0) If the WACC increased by 0.25pp, the fair value would decrease by DKK 0 (2021: DKK 0)
Venture Capital (Private - LP)	<ul style="list-style-type: none"> Adjusted reported NAV 	<ul style="list-style-type: none"> Latest reported NAV adjusted for capital calls, capital returns and pricing development (if relevant) 	<ul style="list-style-type: none"> N/A
Credit	<ul style="list-style-type: none"> Closing prices according to exchange markets Estimated market price based on observable input 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Credit (Private - LP)	<ul style="list-style-type: none"> Adjusted reported NAV 	<ul style="list-style-type: none"> Latest reported NAV adjusted for capital calls, capital returns and pricing development (if relevant) 	<ul style="list-style-type: none"> N/A
EM debt	<ul style="list-style-type: none"> Closing prices according to exchan Estimated market price based on observable input 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Real Assets (Private – Direct)	<ul style="list-style-type: none"> Discounted cash flows Cost at recent 	<ul style="list-style-type: none"> Cash flows and discount rates Price at financing round 	<ul style="list-style-type: none"> If the WACC increased by 0.25pp, the fair value would decrease by DKK 1,187 million (2021: DKK 861 million)
Real Assets (Private – LP)	<ul style="list-style-type: none"> Adjusted reported NAV 	<ul style="list-style-type: none"> Latest reported NAV adjusted for capital calls, capital returns and pricing development (if relevant) 	<ul style="list-style-type: none"> N/A
Bonds	<ul style="list-style-type: none"> Closing prices according to exchange markets Estimated market price based on observable input 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A

* The fair value of certain total return swaps and bonds included as collateral under Public Equity is estimated based on observable input.

4.2 Financial instruments and financial risk management

Financial instruments

The company contracts derivatives to hedge financial assets based on individual considerations. The table below shows the derivatives contracted to hedge currency exposure on investments which give rise to value adjustments in the statement of comprehensive income:

DKK million	31 December 2022		31 December 2021	
	Contract amount	Market value	Contract amount	Market value
USD	-4,673	91	-4,644	-5
EUR	172	54	533	-13
GBP	-508	13	-350	-5
SEK	-23	0	-57	0
CHF	-211	0	-233	0
Other	50	0	-6	0
Total	-5,193	158	-4,757	-23

Our policy regarding currency hedging is described in the following section on financial risk management.

Financial risk management

In its ordinary course of activities, Novo Holdings actively manages a variety of financial risks including currency risk, credit risk, interest rate risk, price risk and liquidity risk. Novo Holdings identifies, measures and monitors risk through various control mechanisms as detailed in the following sections, including maximum approved counterparty exposure and diversifying exposures and activities across a variety of instruments, markets and counterparties. The financial risk is continually monitored by the Allocation & Risk Management Committee to ensure that appropriate steps are taken if the portfolio allocation deviates from the defined long-term risk targets.

Type	Financial risk level	Basis for financial risk level assessment
Currency risk	Medium	Relatively high unhedged allocation towards USD
Credit risk	Low	Low allocation to high yield bonds
Interest rate risk	Low	High allocation to short-term bonds
Price risk	High	High allocation to diversified growth assets
Liquidity risk	Low	High allocation to liquid assets

Currency risk

Currency risk is the risk of financial loss from change in currency rates. Currency risk arises as Novo Holdings invests in financial assets in other currencies than DKK. Most of the expenses are denominated in DKK.

Risk management policies and procedures

The financial assets in the Investment Portfolio are primarily exposed to USD, EUR and GBP. Novo Holdings policy is not to hedge equity-based assets, but to hedge bond-based and liquid assets based on individual considerations.

Hedging of currency exposure is carried out through currency derivatives, which generally have a maturity period that would not exceed six months.

The currency exposure is monitored on a monthly basis by Allocation & Risk Management Committee and reported to the Novo Nordisk Foundation on a quarterly basis.

The following table details the exposure to currency risk:

	Value 31 December 2022		Value 31 December 2021	
	Local currency, million	DKK million	Local currency, million	DKK million
Traded investment assets				
USD	\$ 12,204	84,783	\$ 11,520	75,672
EUR	€ 4,725	35,138	€ 6,078	45,204
GBP	£ 1,873	15,721	£ 1,647	14,609
Other	N/A	0	N/A	1,076
FX derivatives				
USD	-\$ 673	-4,673	-\$ 707	-4,644
EUR	€ 23	172	€ 72	533
GBP	-£ 61	-508	-£ 40	-350
Other	N/A	-184	N/A	-296
Cash in foreign currency				
USD	\$ 49	342	\$ 20	133
EUR	€ 2	15	€ 1	9
GBP	£ 1	5	£ 0	2
Other	N/A	0	N/A	0

The following table details the sensitivity to currency fluctuations:

	31 December 2022		31 December 2021	
	Unhedged exposure Local currency million	Impact on gain/loss for 2022 (DKK million)	Unhedged exposure Local currency million	Impact on gain/loss for 2021 (DKK million)
10% USD appreciation	\$ 11,580	8,045	\$ 10,833	7,116
10% GBP appreciation	£ 1,813	1,522	£ 1,607	1,426

The unhedged exposure relative to the total exposure in USD is 95% in 2022 (94% in 2021). The exposure and sensitivities in the table above includes non-monetary items. Based on monetary items alone, the impact on gain/loss in 2022 from a 10% USD appreciation and a 10% GBP appreciation would be DKK 496 million (2021: DKK 666 million) and DKK 9 million (2021: 14 million), respectively. A depreciation in currencies would have an equal but opposite impact.

Credit risk

Credit risk occurs in relation to bonds and other contractual obligations and is the risk of financial loss from failure of a counterparty to meet the contractual obligations.

Risk management policies and procedures

The company's policy is to limit the risk of financial loss from counterparty default by having most of the interest-bearing investments in Danish government bonds and domestic mortgage credit bonds with low credit risk and a minor share in high yield debt with lower credit rating. Credit ratings are

considered and monitored by the investment teams to evaluate the risk of loss from default. Investments are made across a variety of issuers to reduce the concentration of credit risk. Based on individual consideration of each asset, it is decided whether the credit risk should be hedged through derivatives.

The debt investments with high credit risk are mainly classified within Venture Capital (convertible bonds) and Credit (corporate debt in developed market). The following table illustrates the exposure of the Investment Portfolio to credit risk:

DKK million	2022	2021	Credit risk assessment
Public Equity*	6,118	4,579	Low risk
Venture Capital	283	198	High risk
Credit	13,897	12,726	Medium/High risk
Bonds	17,076	22,298	Low risk
Total	37,374	39,801	

*The credit risk assessment for public equity is based on the bonds included as collateral for total return swaps.

Interest rate risk

Interest rate exposure arises in relation to interest-bearing investments and is the risk of financial loss from a change in interest rates.

Risk management policies and procedures

Novo Holdings policy is to allocate the majority of the interest-bearing asset exposure to Danish government bonds and domestic mortgage credit bonds, and a minority to high yield debt. The interest rate risk is not hedged through derivatives, but the duration of the portfolio is adjusted to a desired exposure.

The following table details the market value and the duration of the interest-bearing investments. The future payments from the floating rate interest bearing assets will fluctuate with the short-term market interest rates. However, the fair value will not fluctuate significantly with changes in market interest rates.

An increase of one percentage point in the interest rate would, other things being equal, result in a decrease in the interest bearing investments of DKK 432 million (2021: DKK 507 million).

DKK million	2022		2021	
	Fair value	Duration (years)	Fair value	Duration (years)
Floating	8,902	0.2	9,912	0.2
Fixed	18,324	1.3	19,239	1.5
Mix	10,148	1.7	10,650	1.8
Total	37,374	1.2	39,801	1.3

Price risk

Price risk is the risk that the value of the Investment Portfolio will fluctuate due to changes in the market price, caused by factors specific to the individual investment, the sector in which the investment operates or factors generally affecting all similar investments traded in the market.

Risk management policies and procedures

Novo Holdings invests both directly and indirectly through positions in mutual funds and private equity funds. The price risk is generally not hedged through derivatives. To minimise the price risk while still achieving an attractive return, the Investment Portfolio is allocated according to a predefined set of risk tolerance levels with the following specific risk measures:

1. Sustaining the contribution to society: The risk of not maintaining the real purchasing power of the Investment Portfolio (net of grant payouts) over the coming 10 years, excluding the effect from the cash inflow from Novo Nordisk and Novozymes.
2. Sustaining the portfolio value: The risk that the Investment Portfolio will lose 25% or more in value over the coming 5 years, including the effect from grant payouts and excluding cash inflow from Novo Nordisk and Novozymes.
3. Limiting the exposure to single investments: No single investment can represent more than a certain amount (%) of the Investment Portfolio.

The defined risk measures and portfolio allocation are monitored on a monthly basis by the Allocation & Risk Management Committee and reported to the Boards of Novo Holdings and of the Novo Nordisk Foundation on a quarterly basis. In addition to the measures above, the Committee uses simulated portfolio returns in historical stress scenarios to evaluate the current and forward-looking price risk.

The value exposed to price risk is the value of the Investment Portfolio, which is detailed in the following table.

DKK million	31 December 2022				31 December 2021			
	Life Science Investments	Capital Investments	Total Investments	%	Life Science Investments	Capital Investments	Total Investments	%
Public Equity	32,645	34,989	67,634	38%	38,632	41,768	80,400	44%
Private Equity	49,290	3,621	52,911	29%	39,061	2,899	41,960	23%
Venture Capital	14,059	2,364	16,423	9%	15,345	1,472	16,817	9%
Credit	1,705	12,192	13,897	8%	1,485	11,240	12,725	7%
Real Assets	0	12,876	12,876	7%	0	8,396	8,396	5%
Bonds	0	17,076	17,076	9%	0	22,299	22,299	12%
Total	97,699	83,118	180,817	100%	94,523	88,074	182,597	100%

A decrease of 10 percent in the average price would, other things being equal, result in a decrease in the portfolio value DKK 18,082 million (2021: DKK 18,260 million). An increase in the average price of 10% would have an equal but opposite impact.

Liquidity risk

Liquidity risk is the risk of not being able to raise enough cash to meet the financial obligations when they fall due. Novo Holdings' amount of financial obligations is minimal compared to the amount of liquid financial assets, and the direct liquidity risk is therefore immaterial. However, Novo Holdings has material indirect financial obligations towards the Novo Nordisk Foundation's grant-giving obligations. The main financial obligation is to ensure the Novo Nordisk Foundation's substantial commitments to charity, investment activities and commitment to providing a stable basis for the commercial and research activities of the companies in the Novo Group.

Risk management policies and procedures

The liquidity risk is monitored on a monthly basis by the Allocation & Risk Management Committee and reported to the Boards of Novo Holdings and the Novo Nordisk Foundation on a quarterly basis. The Investment Portfolio is allocated to ensure that the Novo Nordisk Foundation can liquidate assets at any time, without incurring losses from forced disposals, for a value corresponding to i) actual committed as well as expected 5-year grant payout obligations plus, ii) an additional buffer. The current liquidity reserve is assessed by grouping all investments into different liquidity categories with a weight from 0% to 100%. The categorisation is based on daily trading volumes, which are used to estimate the time needed to divest the investments without impacting the trading prices negatively.

In addition to the liquidity reserve, the expected cash inflow (i.e. dividends and share buybacks) from Novo Nordisk and Novozymes also supports that the Novo Nordisk Foundation can meet current and future grant payout obligations. The strategic allocation of the Investment Portfolio provides for the ability to manage a liquidity shortfall, including the unlikely event that the cash inflow from Novo Nordisk and Novozymes were discontinued.

To further ensure that the Novo Nordisk Foundation will have enough liquidity to meet its financial obligations, the target amount of bonds in the Investment Portfolio is set to exceed the current grant payout obligations. Finally, the company also monitors its short-term liquidity, which is measured by the amount of highly-liquid, short-term bond investments with high credit rating in the Investment Portfolio.

5. Remuneration

5.1 Remuneration to the Board of Directors

DKK thousands	2022				2021			
	Board fee	Committee work	Travel and other allowance	Total	Board fee	Committee work	Travel and other allowance	Total
Lars Rebien Sørensen	1,725	-	112	1,837	1,725	-	74	1,799
Steen Riisgaard	1,150	-	112	1,262	1,150	-	74	1,224
Jean-Luc Butel	575	500	372	1,447	575	500	224	1,299
Viviane Monges	575	144	350	1,069	575	144	380	1,099
Jeppe Christiansen	575	-	112	687	575	-	74	649
Francis Cuss	575	-	335	910	575	-	74	649
*Carsten Stendevad	-	-	-	-	575	-	149	724
**Henrik Poulsen	575	-	112	687	575	-	74	649
***Britt Meelby Jensen	431	500	37	968	0	0	0	0
	6,181	1,144	1,542	8,867	6,325	644	1,123	8,092

Committee work consists of Novo Advisory Group.

*Carsten Stendevad has resigned on 29 November 2021.

**Henrik Poulsen joined the Board March 2021.

***Britt Meelby Jensen joined the Board March 2022.

5.2 Long-term incentive programme

In 2017, a Long Term Incentive Programme (the LTIP) was introduced for all employees in Novo Holdings, under which certain targets must be met within a three-year period. In the following years, additional Long Term Incentive Programmes were introduced, setting performance targets for a four-year period. Based on the investment returns for 2022, we have made provision for these incentive schemes.

DKK million	2022	2021
Other provisions		
Provision for incentive fees at the beginning of the year	133	79
Paid during the year	-66	-45
Appreciation during the year, net	85	99
Provision for incentive fees at the end of the year	152	133

6. Other disclosures

6.1 Contractual obligations

At year-end, Novo Holdings was contractually obligated to make callable follow-on investments or capital contributions of the total outstanding amount:

DKK million	2022	2021
Contractual obligations related to Life Science Investments	6,635	5,096
Contractual obligations related to Capital Investments	12,372	7,526
Total contractual obligations	19,007	12,622

In connection with the proposed merger of Novozymes and Chr. Hansen, Novo Holdings has made certain commitments under given terms and conditions including providing irrevocable undertakings in support of the proposed merger including to: vote in favor of the merger at the extraordinary general meetings of Novozymes and Chr. Hansen, and exchange Novo Holdings' 22% stake in Chr. Hansen at an exchange ratio of 1.0227 new B-shares in Novozymes for each individual Chr. Hansen share. Other Chr. Hansen shareholders have been offered an exchange ratio of 1.5326.

6.2 Events after the balance sheet date

There have been no events after the balance sheet date which would have a significant impact on the assessment of Novo Holdings financial position as of December 31, 2022.

6.3 Financial definitions

Equity ratio

Total equity at year-end as a percentage of total assets at year-end.

6.4 Related parties

Related party transactions

The Novo Nordisk Foundation, Novo Ventures (US) Inc., Novo Holdings Equity (US), Inc., Novo Holdings Equity Asia Pte. Ltd., Novo 1999 Advisory Shanghai Ltd., the Sonion Group, the Xellia Group, the Novo Nordisk Group, the Novozymes Group, the NNIT Group, the BBI Group, the Altasciences Group, the Ritedose Group, the MKG Group, the KabaFusion Group, the Dades Group, other subsidiaries, associated companies and the Boards and Executive Managements of the Novo Nordisk Foundation and Novo Holdings are considered to be related parties. All agreements have been negotiated on market-based terms, and the majority of the agreements are valid for one year.

Other than the above-mentioned intercompany transactions and normal remuneration to management disclosed in Note 2.3 "Employee costs", no transactions have been concluded with the Board of Directors, Executive Management or other related parties.

Ownership

Pursuant to section 112(1) of the Danish Financial Statements Act, no consolidated financial statements have been prepared. Novo Holdings is a wholly-owned subsidiary of the Novo Nordisk Foundation and is consolidated into the group financial statements of the Novo Nordisk Foundation.

The consolidated financial statements of the Novo Nordisk Foundation can be ordered at:

Novo Nordisk Foundation
Tuborg Havnevej 19
DK-2900 Hellerup
Municipality of Gentofte, Denmark

DKK million	2022	2021
Novo Nordisk Foundation		
Sale of services to the Novo Nordisk Foundation	123	100
Purchase of services from the Novo Nordisk Foundation	16	13
Interest on loan to the Novo Nordisk Foundation	44	0
Long term portion of loan from the Novo Nordisk Foundation (see note 3.3)	22,644	0
Short term portion of loan from the Novo Nordisk Foundation (see note 3.3)	7,400	0
The Novo Nordisk Foundation's share of joint Investment Portfolio	26,657	27,291
The Novo Nordisk Foundation's share of result from joint Investment Portfolio	-2,997	3,432
Dividend payment to the Novo Nordisk Foundation	38,000	6,000
Novo Nordisk A/S		
Participation in share buy-back programme (sale of shares)	6,982	6,696
Purchase of services from Novo Nordisk A/S	5	4
Novozymes A/S		
Participation in share buy-back programme (sale of shares)	0	338
Purchase of services from Novozymes A/S	1	0
NNIT A/S		
Purchase of services from NNIT A/S	20	22
Novo Ventures (US), Inc.		
Purchase of services from Novo Ventures (US), Inc.	178	118
Novo Holdings Equity (US), Inc.		
Purchase of services from Novo Holdings Equity (US), Inc.	127	65
Novo Holdings Equity Asia Pte. Ltd		
Purchase of services from Novo Holdings Equity Asia Pte. Ltd.	18	12
Novo 1999 Advisory Shanghai Ltd.		
Purchase of services from Novo 1999 Advisory Shanghai Ltd.	4	0
Other subsidiaries and associates		
Loans to subsidiaries	7,434	2,339
Loans from subsidiaries	777	751
Contingent liabilities regarding commitments to subsidiaries	390	0
Loans to associates	163	64
Contingent liabilities regarding commitments to associates	0	586

6.5 Group companies

Listed by investment category and secondarily degree of control.

Novo Group

Subsidiaries

	Ownership/voting rights*
Novo Nordisk A/S, Denmark	28.1%/76.9%
Novozymes A/S, Denmark	25.6%/72.7%

Life Science Investments

Subsidiaries

21st. Bio A/S, Denmark	42%
Acesion Pharma ApS, Denmark	82%
Aloop Therapeutics ApS, Denmark	100%
Altasciences HoldCo A/S, Denmark	100%
Aristea Therapeutics, Inc., USA	59%
Availity HoldCo A/S, Denmark	100%
Avilex Pharma ApS, Denmark	56%
BBI HoldCo A/S, Denmark	100%
BiOrigin ApS, Denmark	100%
Claris Biotherapeutics, Inc., USA	52%
Ejendomsselskabet Novo Holdings P/S, Denmark	100%
Ejendomsselskabet Novo Holdings Komplimentar ApS, Denmark	100%
ENV HoldCo A/S, Denmark	100%
ERT HoldCo A/S, Denmark	100%
HyperBio Therapeutics ApS, Denmark	100%
Indkøbselskabet Novo Holdings A/S, Denmark	100%
NH Kronos GP, LLC, USA	100%
NH Kronos Ultimate Holdings, LP, USA	89%
Novo Accelerator, Inc., USA	100%
Novo DP2, Inc., USA	100%
Novo Holdings Equity (US) Inc., USA***	100%
Novo Holdings Equity Asia Pte. Ltd., Singapore***	100%
Novo Invest 1 A/S, Denmark	100%
Novo Invest 2A A/S, Denmark	100%
Novo Invest 2E A/S, Denmark	100%
Novo Invest Asia A/S, Denmark	100%
Novo Maia, LP, USA	77%
Novo Ventures (US), Inc., USA***	100%
Novo Ventures 1 P/S, Denmark	100%
Obis Medicines ApS, Denmark	94%
Ritedose HoldCo A/S, Denmark	100%
Riva Therapeutics, Inc., USA	89%
Sonion HoldCo A/S, Denmark	100%
Xellia HoldCo A/S, Denmark	100%

Associates

ADcendo ApS, Denmark	20%
Allievex Corporation, USA	43%
AMRA Medical AB, Sweden	26%
Antag Therapeutics ApS, Denmark	43%
Asgard Therapeutics AB, Sweden	20%
Bactolife ApS, Denmark	26%
Biomason Inc., USA	30%
Biosyntia ApS, Denmark	43%
Breye Therapeutics ApS, Denmark	26%
Chr. Hansen Holding A/S, Denmark	22%
Chromologics ApS, Denmark	24%
Cirius Therapeutics, Inc., USA	20%
Commit Biologics ApS, Denmark	50%
Convatec Group Plc., United Kingdom	21%
Draupnir Bio ApS, Denmark	28%
Engimmune Therapeutics AG, Schwitterland	31%
F2G Limited, United Kingdom	25%
Glycomine, Inc., USA	33%
Hemab ApS, Denmark	33%
Heparegenix GmbH, Germany	24%
Hoba Therapeutics ApS, Denmark	49%
Inspirna, Inc., USA	23%
Karus Therapeutics Ltd., United Kingdom	25%
MinervaX ApS, Denmark	26%
Muna Therapeutics ApS, Denmark	20%
NMD Pharma ApS, Denmark	20%
Nuvig Therapeutics Inc., USA	26%
Orexo AB, Sweden	28%
Revagenix, Inc., USA	23%
STipe Therapeutics ApS, Denmark	29%
Tarveda Therapeutics, Inc., USA	37%
The Protein Brewery BV, Netherlands	22%
Tribune Therapeutics AB, Sweden	34%
Vestaron Corporation, USA	25%

Capital Investments**Subsidiaries**

Dades A/S, Denmark	54%
NNIT A/S**, Denmark	33.5%
Komplementarselskabet Novo Capital Investors ApS, Denmark	100%
Novo Capital Investors P/S, Denmark	100%

Associates

NIP Norway Gardermoen Logistikkbygg Holding AS, Norway	27%
NREP A/S, Denmark	25%

* Voting rights are only disclosed if different from ownership. Voting rights are calculated nominally, i.e. excluding treasury shares.

** NNIT A/S is listed as a subsidiary given that Novo Holdings A/S and the subsidiary Novo Nordisk A/S together own 51% of the shares and votes in the company.

*** The companies are separate legal entities that provide certain consultancy services to Novo Holdings, mainly within the areas of identifying, analysing, and negotiating investment opportunities among life science and biotech companies in the US and Asia. They also conduct related follow-up activities, such as board memberships and control and reporting efforts. Novo Holdings Equity Asia Pte., Ltd. owns all shares in Novo 1999 Advisory Shanghai Ltd., China, which also provides certain consultancy services to Novo Holdings.

For a complete overview of the subsidiaries in Novo Holdings A/S group, please refer to the consolidated financial statements of the Novo Nordisk Foundation.

Statements

Management's statement and Auditor's report

Management's statement

The Executive Management and Board of Directors have today considered and adopted the Annual Report of Novo Holdings A/S for the financial year 1 January – 31 December 2022.

The Annual Report is prepared in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act.

In our opinion, the financial statements give a true and fair view of the financial position at 31 December 2022 of the Company and of the results of the Company's operations and cash flows for 2022.

In our opinion, Management's review includes a true and fair account of the development in the operations and financial circumstances of the Company, of the results for the year and of the financial position of the Company as well as a description of the most significant risks and elements of uncertainty facing the Company.

We recommend that the Annual Report be adopted at the Annual General Meeting.

Hellerup, 8 March 2023

Executive Management

Kasim Kutay
CEO

Nigel Govett
CFO

Board of Directors

Lars Rebien Sørensen
Chair

Steen Riisgaard
Vice Chair

Jean-Luc Butel

Henrik Poulsen

Jeppe Christiansen

Viviane Monges

Francis Cuss

Britt Meelby Jensen

Independent Auditor's report

To the Shareholder of Novo Holdings A/S

Opinion

In our opinion, the Financial Statements give a true and fair view of the financial position of the Company at 31 December 2022, and of the results of the Company's operations and cash flows for the financial year 1 January - 31 December 2022 in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act.

We have audited the Financial Statements of Novo Holdings A/S for the financial year 1 January - 31 December 2022, which comprise statement of comprehensive income, balance sheet, equity statement, cash flow statement and notes, including a summary of significant accounting policies ("financial statements").

Basis of opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs) and the additional requirements applicable in Denmark. Our responsibilities under those standards and requirements are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (IESBA Code) and the additional ethical requirements applicable in Denmark, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Statement on Management Review

Management is responsible for Management's Review.

Our opinion on the financial statements does not cover Management's Review, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read Management's Review and, in doing so, consider whether Management's Review is materially inconsistent with the financial statements or our knowledge obtained during the audit, or otherwise appears to be materially misstated.

Moreover, it is our responsibility to consider whether Management's Review provides the information required under the Danish Financial Statements Act.

Based on the work we have performed, in our view, Management's Review is in accordance with the Financial Statements and has been prepared in accordance with the requirements of the Danish Financial Statements Act. We did not identify any material misstatement in Management's Review.

Management's Responsibilities for the Financial Statements

Management is responsible for the preparation of Financial Statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act, and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, Management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting in preparing the financial statements unless Management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and the additional requirements applicable in Denmark will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit conducted in accordance with ISAs and the additional requirements applicable in Denmark, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The

risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
- Conclude on the appropriateness of Management's use of the going concern basis of accounting in preparing the financial statements and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and contents of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that gives a true and fair view.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Hellerup, 8 March 2023

PricewaterhouseCoopers

Statsautoriseret Revisionspartnerselskab
CVR No 33 77 12 31

Mogens Nørgaard Mogensen

State Authorised Public Accountant
mne21404

Tue Stensgård Sørensen

State Authorised Public Accountant
mne32200



Novo Holdings has a substantial portfolio of industrial biotech companies providing sustainable solutions within areas including agriculture and food production.

