CMB International Global Markets | Equity Research | Initiation

Thermo Fisher (TMO US)

A global leader in life sciences with favourable industry trends; initiate at BUY

Thermo Fisher, distinguished by its extensive portfolio of products and services, stands as a global leader in life science services. We are confident in the long-term prospects of Thermo Fisher as a global leader in life sciences industry, backed by its economies of scale, strong industry consolidation capabilities and its end-to-end platform amid the expected turnaround in client destocking and biotech funding. We initiate coverage on the stock with a BUY rating and TP of US\$670.00.

- A business with unrivalled scale and spectrum. With the pharmaceutical clients being the business focus, Thermo Fisher has propelled itself to the forefront of the global life sciences and CRO and CDMO (collectively, "CXO") industries. As the only one-stop platform in the industry, the products and services offered by Thermo Fisher covers all stages of drug R&D, from drug discovery to clinical trials and commercialization manufacturing. Thermo Fisher's one-stop platform enables cross-selling within internal segments to achieve inter-segment synergy. Thermo Fisher's bioproduction services provide its CDMO business with competitive advantages in securing contracts. Its clinical services complement CDMO offerings by addressing the escalating concerns related to clinical drug logistics.
- An efficient integrator with abundant financial resources. Thermo Fisher is a proactive consolidator in the global life sciences industry. The Company has made M&A a core strategy and has been investing significant amounts of resources in this direction. Management indicated that 60-75% of capital deployment will be directed towards M&As. Despite its ambitious M&A execution in the past, Thermo Fisher managed to deliver consistently growing free cash flows, which provides solid financial support for further expansion.
- Multiple growth drivers bode well for long-term industry outlook. The growth outlook of the global life sciences market is impacted by multiple factors, including global demand for pharmaceutical products, costs associated with drug production, pharmaceutical R&D expenses, Capex by pharmaceutical companies and CXOs, as well as financing trends within the healthcare industry. We highlight the potential recovery of healthcare funding given the Fed's interest rate cuts, which will drive the demand recovery.
- Downstream destocking is likely to approach an end by the end of 2024. The global pharmaceutical sector encountered challenges with elevated inventory levels following the COVID-19 pandemic outbreak. Triggered by the COVID-19 pandemic, drug R&D firms amassed considerable amounts of raw materials for production in 2021. Inventories was maintained relatively stable in 2022-23 but still lingered at historical highs. Management of several leading life science companies has indicated that inventories of downstream customers are reverting to normal levels. We expect that downstream customers are likely to complete inventory destocking and return to normal ordering patterns by the end of 2024.
- Initiate at BUY. Our TP of US\$670.00 is based on a 10-year DCF model with WACC of 6.12% and terminal growth of 2.0%. We forecast Thermo Fisher's revenue to grow by +0.4%/ +5.6%/ +8.3% YoY and adjusted net income to increase by -1.0%/ +5.7%/ +10.4% YoY in 2024E/ 25E/ 26E, respectively.

Earnings Summary

(YE 31 Dec)	FY22A	FY23A	FY24E	FY25E	FY26E
Revenue (US\$ mn)	44,915	42,857	43,033	45,457	49,234
YoY growth (%)	14.5	(4.6)	0.4	5.6	8.3
Adjusted net profit (US\$ mn	9,159	8,364	8,278	8,752	9,662
YoY growth (%)	(8.2)	(8.7)	(1.0)	5.7	10.4
EPS (Adjusted) (US\$)	23.36	21.67	21.61	23.21	26.03
Consensus EPS (US\$)	na	na	21.69	23.49	26.21
P/E (Adjusted) (x)	21.9	23.6	23.6	21.9	19.6
P/B (x)	4.5	4.2	4.0	3.7	3.4

Source: Company data, Bloomberg, CMBIGM estimates



BUY (Initiate)

Target Price	US\$670.00
Up/Downside	31.6%
Current Price	US\$509.12

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Stock Data

Mkt Cap (US\$ mn)	194,993.0
Avg 3 mths t/o (US\$ mn)	383.6
52w High/Low (US\$)	624.21/482.39
Total Issued Shares (mn)	383.0
Source: FactSet	

Shareholding Structure

Vanguard	8.6%
BlackRock	7.6%
Source: NYSE	

Share Performance

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	Absolute	Relative					
1-mth	-15.4%	-16.1%					
3-mth	-17.2%	-21.6%					
6-mth	-14.3%	-23.1%					
	-						

Source: FactSet

12-mth Price Performance



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Contents

Investment thesis3	
Leading position in global life sciences industry5	
A comprehensive and diversified business	5
Providing one-stop services for pharmaceutical companies	9
An efficient integrator in the industry	11
China remains a strategically important market	14
Large global life sciences market with solid growth drivers16	
Leading life sciences companies delivered sustainbale growth	16
Multiple growth drivers bode well for long-term industry outlook	17
Downstream destocking is likely to approach an end by the end of 2024	20
M&A is an universal route to grow	21
Thermo Fisher expands more aggressively to the downstream	22
Continued investment in China market	23
Financial analysis25	
Expect revenue to grow at CAGR of 4.7% in 2023-26E	25
Expect operating margin to be maintained at pre-pandemic levels	26
Valuation29	
Risks to our rating and target price	



Investment thesis

A global leader with unrivalled scale and spectrum

Thermo Fisher, distinguished by its extensive portfolio of products and services, stands as a global leader in life science services. Thermo Fisher offers clients over 2.5mn products and extensive support services through its sub-brand, Fisher Scientific. Its clients span across various sectors including pharmaceuticals, industry, environment, government, and academic, etc. With the pharmaceutical clients being the business focus, Thermo Fisher has propelled itself to the forefront of the global life sciences and CRO and CDMO (collectively, "CXO") industries.

As the only one-stop platform in the industry, the products and services offered by Thermo Fisher covers all stages of drug R&D, from drug discovery to clinical trials and commercialization manufacturing. In the drug discovery phase, Thermo Fisher offers products and services such as compound screening, mass spectrometry, and Cryoelectron microscopy to assist researchers in biological and medical studies at the genomic and molecular levels. In the drug development phase, Thermo Fisher, through its clinical CRO subsidiary PPD, provides clients full-stage clinical research services (Phase I - IV) worldwide. In the commercialization phase, Thermo Fisher's CDMO platform delivers efficient outsourcing production services for all major drug types, including small molecules, biologics, vaccines, mRNA, and cell & gene therapy (CGT).

Thermo Fisher's one-stop platform enables cross-selling within internal segments to achieve inter-segment synergy. Essential products from Thermo Fisher's bioproduction portfolio, such as cell culture media, chromatography systems, and single-use bioreactors, are crucial for drug production, providing its CDMO business with competitive advantages in securing manufacturing contracts. Moreover, PPD's clinical services complement CDMO offerings by addressing the escalating concerns related to clinical drug logistics in today's more complex clinical trials. This collaboration generates additional business opportunities for both sides and accelerates clinical trial progress, helping clients save R&D costs and expedite the time-to-market for investigational drugs. Thermo Fisher's extensive service capabilities across the entire drug R&D value chain enable the company to engage with clients at the early R&D stage, laying the foundation for future services and fostering long-term partnerships.

An efficient integrator with abundant financial resources

Thermo Fisher is a proactive consolidator in the global life sciences industry. Since the merger of Thermo Electron and Fisher Scientific created the current Thermo Fisher in 2006, the Company has made M&A a core strategy and has been investing significant amounts of resources in this direction. Based on its historical data, Thermo Fisher's total expenditure on M&A accounted for 18% of its cumulated revenue and 92% of its cumulated operating net cash flow from 2010 to 2023. Despite the substantial cost of M&A activities, Thermo Fisher remains committed to M&A strategy for future growth. At Thermo Fisher's 2024 Investor Day, its management indicated that 60-75% of capital deployment would be directed towards M&As, leveraging the still highly fragmented global life sciences market for business expansion.

Despite its ambitious M&A execution in the past, Thermo Fisher managed to deliver a consistently growing free cash flow, which provides solid financial support for further business expansion. The free cash flow increased from US\$2.2bn in 2014 to US\$7.0bn in 2023, representing a CAGR of 12.1%.



Multiple growth drivers bode well for long-term industry outlook

The growth outlook of the global upstream life sciences market is impacted by multiple factors, including global demand for pharmaceutical products, costs associated with drug production, pharmaceutical R&D expenditures by pharmaceutical companies, Capex by pharma companies and CRO and CDMO companies, as well as financing trends within the healthcare industry.

Among these factors, pharmaceutical R&D spending, production costs, and Capex are directly linked to the demand in instruments, consumables, and related services provided by life sciences companies. Data collected by us indicate those critical metrics recorded a consistently growing pace in the past for all major industry participants, including pharma companies, biotech companies and CXO companies, and is expected to maintain growth momentum into the future.

Funding environment for drug innovation is resilient. Global healthcare financing trends reflect the R&D and manufacturing needs of biotech companies, which are currently the major force driving pharmaceutical innovation in the global market. Although funding experienced significant declines in 2022 and 2023, early signs of recovery have been observed in late 2023 and 2024. We believe the kick-off of an easing cycle by the US Federal Reserve will further drive the recovery in healthcare funding, and the demand in life sciences, as a result. In addition, the business model where large pharma companies license in innovative drugs from biotech companies has consistently been a crucial source of funding for global pharmaceutical R&D innovation. Our analysis of the free cash flow of global major pharma companies from 2011 to 2023 reveals that big pharma's free cash flow was in a steady upward path since 2015, setting a robust foundation for external investments. Furthermore, the financial position of biotech companies saw an enhancement in terms of cash runway in 2023.

Downstream destocking is likely to approach an end

The global pharmaceutical sector encountered challenges with elevated inventory levels following the COVID-19 pandemic outbreak. However, we expect that downstream customers are likely to complete inventory destocking by the end of 2024. Spurred by the optimistic projections of medicine demand and fear for the sustained supply chain constraints amidst the COVID-19 pandemic, drug R&D firms amassed considerable amounts of raw materials for production in 2021. Yet, recognizing that actual demand fell short of expectations, the sector adopted a more prudent inventory management strategy. Consequently, inventories were maintained relatively stable in 2022 and 2023 but still lingered at historical highs. Management of several leading upstream life science companies has indicated that inventories of downstream customers (namely, pharma, biotech and CXOs) are reverting to normal levels. We think that the destocking endeavors in 2023 and 1H24 may assist the pharmaceutical R&D sector to revert to a routine procurement cadence by the end of 2024. This shift should trigger the normalization of sales of products and services in the life sciences area.

Initiate at BUY with TP of US\$670.00

We initiate Thermo Fisher with a BUY rating. We derive a TP of US\$670.00 on a 10-year DCF valuation with WACC of 6.12% and terminal growth rate of 2.0%. We are confident in the long-term prospects of Thermo Fisher as a global leader in the life sciences industry, backed by its economies of scale, strong industry consolidation capabilities and its end-toend platform along with the expected industry turnaround in client destocking and biotech funding.



Leading position in global life sciences industry

A comprehensive and diversified business

Thermo Fisher, distinguished by its extensive portfolio of products and services, stands as a global leader in serving science. Thermo Fisher offers clients over 2.5mn lab products and extensive support services through its sub-brand, Fisher Scientific. Its clients span across various sectors including pharmaceuticals, industry, environment, government, and academic, etc. With the pharmaceutical clients being the business focus, Thermo Fisher has propelled itself to the forefront of the global life sciences and CRO and CDMO (collectively, "CXO") industries.

The business of Thermo Fisher is structured into four business segments: Life Sciences Solutions, Analytical Instruments, Specialty Diagnostics, and Laboratory Products and Biopharma Services. The Life Sciences Solutions segment offers a comprehensive range of services and products for biological and medical research, discovery, and production of innovative drugs and vaccines, encompassing products such as cell culture, single-use bioreactors, gene editing tools, and gene sequencing. Analytical Instruments segment provides clients with a broad spectrum of equipment, consumables, software, and services that can be applicable across multiple fields. This segment features key products like chromatography, mass spectrometers, and electron microscopes. Under the Specialty Diagnostics segment, Thermo Fisher supplies a rich mix of diagnostic testing tools, and Healthcare Market Channel. The Laboratory Products and Biopharma Services segment caters to almost all aspects of pharmaceutical R&D work, including pharma services (CDMO), clinical CRO, and laboratory equipment, consumables and chemicals.

The comprehensive business structure enables Thermo Fisher to evolve as an indispensable partner to researchers, scientists, and healthcare professionals worldwide, efficiently driving innovation and excellence across the scientific community.

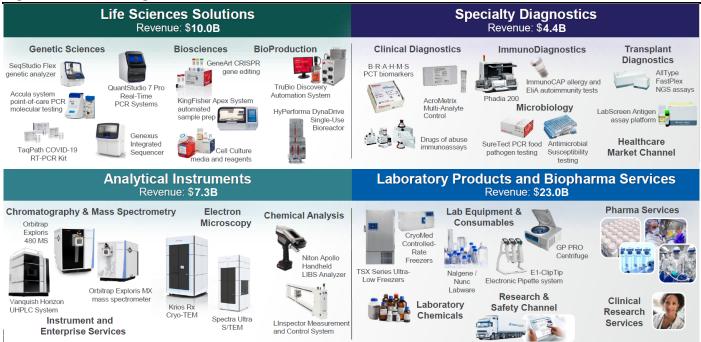


Figure 1: Business segments of Thermo Fisher

Source: Company data, CMBIGM

Note: Segment revenue is based on 2023 reported revenue before intersegment eliminations.



Segment	As % of total revenue	As % of segment revenue	Products and services provided
Life Sciences Solutions	~22%		
- Biosciences		~44%	 Leading reagents, consumables and instruments for research and applied applications Products of choice in life sciences labs
- Genetic Sciences		~28%	 Leading offering for genetic analysis platforms and reagents Automated platform enabling democratization of clinical next-generation sequencing
- BioProduction		~28%	 Best-in-class bioprocessing products Leadership position in cell culture media and single-use technologies Rapidly growing purification and pharma analytics businesses
Analytical Instruments	~17%		
- Chromatography & Mass Spectrometry		~43%	 Premier mass spectrometry offering Strong position in chromatography Leading software and instrument servicing capabilities
- Electron Microscopy		~37%	 Pioneer in revolutionary cryo-EM technology for life sciences Cutting-edge solutions for advanced materials Leading software and instrument servicing capabilities
- Chemical Analysis		~20%	 Large portfolio of portable analytical instruments Leading molecular and elemental spectroscopy instruments Air quality and process monitoring instruments
Specialty Diagnostics	~10%		
- Healthcare Market Channel		~37%	 Leading channel serving reference laboratories and hospitals in N. America Comprehensive offering of diagnostic products
- Clinical Diagnostics		~23%	 Leading diagnostics for sepsis detection and management Complete toxicology menu for drugs of abuse Standard of care testing for multiple myeloma Comprehensive offering of protein assays for immune system disorders
- Immuno Diagnostics		~18%	 Industry-leading in-vitro diagnostics to test for hundreds of allergens Strong offering of diagnostics for autoimmune diseases
- Microbiology		~13%	 Leader in pathogen detection and testing for antibiotic susceptibility Strong offerings for food safety testing
- Transplant Diagnostics		~9%	 Comprehensive solutions to enable patient-donor matching Launching additional post-transplant monitoring solutions
Laboratory Products & Biopharma Services	~52%		
- Clinical Research		~33%	 Leading clinical research services with comprehensive offering Expertise across therapeutic areas, advanced modalities and multiple trial types Comprehensive laboratory services Real-world evidence and digital capabilities
- Research & Safety Market Channel		~28%	 Premier scientific marketplace providing choice, convenience and aggregation services Industry-leading websites, e-commerce and digital capabilities Purpose-built supply chain infrastructure On-site value-added services
- Pharma Services		~28%	 Leading contract development and manufacturing services Expertise across small molecules, biologics and advanced therapies 60+ manufacturing and clinical trial supply sites globally
- Laboratory Products		~11%	 Comprehensive offering of lab consumables, equipment and chemicals Offerings used in every lab, every day

Figure 2: Products & services provided by Thermo Fisher

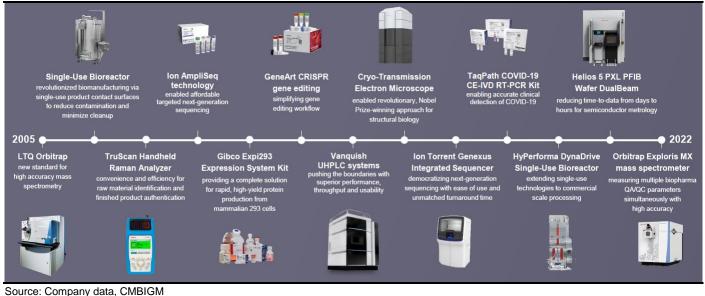
Source: Company date, CMBIGM

Note: Segment revenue as % of total revenue is based on LTM through 2Q24 revenue before intersegment eliminations. CMBIGM estimates the sub-segment revenue as % of segment revenue, basing on charts provided in Thermo Fisher presentation materials.



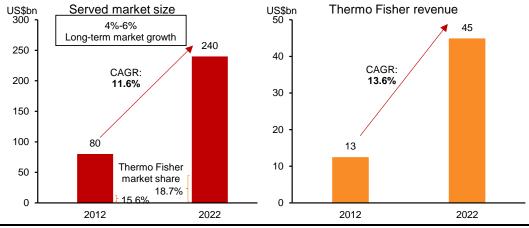
The development of Thermo Fisher has been accompanied by a series of technological breakthroughs, enhancing the Company's position as a global leader in scientific services. Over the past 20 years, scientists in Thermo Fisher have introduced a number of industry-transforming products and technologies. Notable among these are mass spectrometry, single-use bioreactors, cell culture media, gene editing technologies, liquid chromatography systems, and Cryo-electron microscopes, to name a few.

Figure 3: Key scientific advances made by Thermo Fisher



Thermo Fisher targets a substantial market with solid long-term growth prospects. According to data disclosed by Thermo Fisher at its 2023 Investor Day, the size of market the Company serves reached US\$240bn in 2022, with a CAGR of 11.6% in 2012-22. Looking ahead, management forecasted a long-term underlying market growth rate of 4-6%. Driven by the trends of continued technological advancements and industry consolidation, Thermo Fisher has consistently gained market share, evidenced by a higher-than-industry revenue CAGR of 13.6% from 2012 to 2022, translating into an increase in market share from 15.6% to 18.7% during this period. Considering that the market remains relatively fragmented (see Figure 16), we believe that there is still abundant room for Thermo Fisher to further increase its market share in the future.

Figure 4: Thermo Fisher taking market share in a sustainably growing market



Source: Company data, CMBIGM



Thermo Fisher boasts diversified revenue streams. By business segment, Laboratory Products and Biopharma Services emerged as the largest contributor, accounting for 54% of total revenue in 2023. In terms of income type, Thermo Fisher primarily relies on services and consumables, each contributing 41% of total revenue in 2023. Although instrument sales represent a smaller portion at 18%, they typically lay the groundwork for recurring revenue from services and consumables.

By customer type, Pharma & Biotech clients form the largest customer group, generating 57% of revenue over the last twelve months ending 2Q24 (LTM 2Q24). Geographically, North America, predominantly the US, generated 53% of revenue in 2023, while China, contributing approximately 8% of total revenue, stands as the Company's second-largest single market by country after the US.



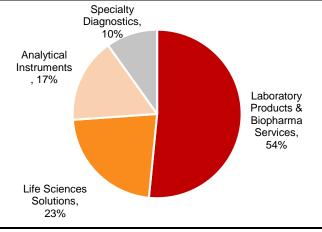
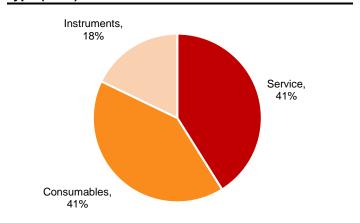
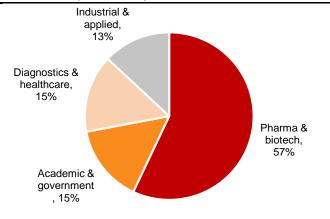


Figure 6: Revenue breakdown of Thermo Fisher by type (2023)



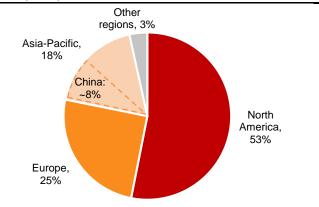
Source: Company data, CMBIGM Note: Before intersegment eliminations.

Figure 7: Revenue breakdown of Thermo Fisher by end market (LTM 2Q24)



Source: Company data, CMBIGM

Figure 8: Revenue breakdown of Thermo Fisher by region (2023)



Source: Company data, CMBIGM

Note: LTM 2Q24 refers to last twelve months ending 2Q24. End market revenue breakdown is based on core revenue, which excludes impacts from acquisitions, currency translation and COVID-19 testing revenue.

Source: Company data, CMBIGM



Pharma & Biotech is the key focus end-market for Thermo Fisher. Three out of Thermo Fisher's four business segments (excluding the Specialty Diagnostics segment) offer specialized products and services to Pharma & Biotech customers, covering all stages of drug R&D from DNA to clinical trials and further to commercial manufacturing. Allowing clients to utilize as much of Thermo Fisher's offerings as possible, this end-to-end service capability to Pharma & Biotech customers substantially distinguishes Thermo Fisher from other companies within the life sciences industry. In recent years, Thermo Fisher's M&A strategies have primarily focused on enhancing its service offerings to Pharma & Biotech customers (see Figure 14), such as the acquisitions of the CDMO service provider Patheon in 2017 and the clinical CRO company PPD in 2021.

Figure 9: Thermo Fisher provides Pharma and Biotech customers with comprehensive products & services

	Life Sciences Solution	ons	Ana	lytical Instruments	\$
Biosciences Reagents and instruments that enab novel drug discovery Essential building blocks for developmer and manufacturing of advanced therapies (e.g., mRNA)	and consumables for a full range of genetic analysis solutions nt • Companion diagnostics	 BioProduction Proven portfolio of technologies for the successful production of biologic therapies and vaccines, that span development through large-scale commercial production 	· ·	Electron Microscopy enable advanced scientific ogies and solutions for biop	
(0.9., 111(14))					
(0.9., 111(19))		Laboratory Produ	cts and Services		
Research & Safety C	hannel Lab Prod	Laboratory Produ	cts and Services Pharma Services	s PPD	
	providing choice, • Full ra		Pharma Services	nd • Clinic	cal Research Services
Research & Safety Cl Distribution channel	providing choice, • Full ra ggregation and c	ducts and Lab Chemicals	Pharma Services nables • Development a	nd • Clinic services	cal Research Services ratory Services
Research & Safety Cl • Distribution channel convenience, and a	providing choice, • Full ra ggregation and c	ducts and Lab Chemicals	Pharma Services nables Development a manufacturing Expertise with a	nd • Clinic services advanced • Labo	

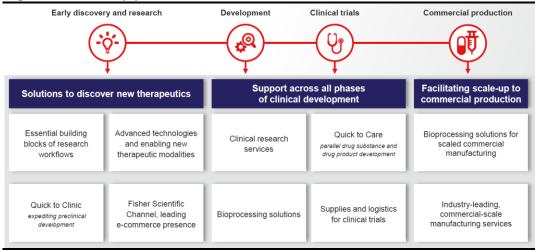
Source: Company data, CMBIGM

Providing one-stop services for pharmaceutical companies

Thermo Fisher's one-stop service platform covers all stages of drug R&D, from drug discovery to clinical trials and commercialization manufacturing. In the drug discovery phase. Thermo Fisher offers products and services such as compound screening, mass spectrometry, and Cryo-electron microscopy to assist researchers in biological and medical studies at the genomic and molecular levels. This helps researchers in understanding disease mechanisms and identifying potential therapeutic targets. In the drug development phase, Thermo Fisher, through its clinical CRO subsidiary PPD, provides clients full-stage clinical research services (Phase I - IV) worldwide. In the commercialization phase, Thermo Fisher's CDMO platform delivers efficient outsourcing production services for all major drug types, including small molecules, biologics, vaccines, mRNA, and CGT. More importantly, essential products from Thermo Fisher's portfolio, such as cell culture media, chromatography systems, and single-use bioreactors, are crucial for drug production, providing the CDMO business with competitive advantages in securing manufacturing contracts. Thermo Fisher's extensive service capabilities across the entire drug R&D value chain enable the company to engage with clients at the early R&D stage, laying the foundation for future services and fostering long-term partnerships.



Figure 10: One-stop platform of Thermo Fisher



Source: Company data, CMBIGM

Thermo Fisher entered the rapidly growing CDMO market through its acquisition of Patheon in 2017. Thermo Fisher holds a leading position in the global bioproduction market, providing critical products for drug production to pharmaceutical companies and CDMO companies, including cell culture media, chromatography systems, and single-use bioreactors. Thus, entering the CDMO sector represents a natural and synergic extension of Thermo Fisher's business. With its comprehensive bioproduction product offerings, the Company has facilitated a swift business integration with Patheon and further empowered Patheon's business growth since the acquisition.

Based on information disclosed at Thermo Fisher 2023 Investor Day, Pharma Services (CDMO business) accounted for ~28% of the Laboratory Products and Biopharma Services segment's revenue in the trailing twelve months ending 1Q23. Assuming this ratio applies to 2022, it implies that Patheon's revenue grew at a CAGR of 22% from 2016 to 2022 to more than US\$6.3bn. Even considering the surging demand triggered by the COVID-19 pandemic in 2020-22, we still view this growth rate of Patheon as remarkable, highlighting Thermo Fisher's exceptional capabilities in post-acquisition business integration. According to data disclosed at its 2024 investor day, revenue of Pharma services reached US\$7bn in the trailing twelve months ending 2Q24, indicating solid growth in 2023 and 1H24.

Figure 11: Thermo Fisher's CDMO capability

	End-to-end 'molecu	Ile to medicine' offering	
	Manufacturing	Packaging, distribution and logistics for clinical > materials and supplies	Commercial manufacturing of drug substance and drug product
Full range of n	nodalities: Biologics S	mall molecule Cell therapy	Gene therapy
60 Sites	20,000 Colleagues	>2,000 Molecules in development in 2022	>8,200 Clinical trials supported in 2022
Accumulated experier	nce in scaling increasing	ntiated breadth of capabilities a ly complex molecules and adv ss processes and quality	
Providing custome	ers faster speed to mar	ket, improved economics an	d access to expertise
urce: Company data, CMBI	GM		

Note: All data shown above were disclosed from Thermo Fisher 2023 Investor Day held on 24 May 2023.



Acquiring PPD, a global leader in clinical CRO, filled the crucial gap in Thermo Fisher's drug R&D service chain. In 2021, Thermo Fisher completed its largest-ever acquisition of PPD at a total purchase price of US\$17bn. This move enabled Thermo Fisher's customers, whether purchasing instruments and consumables for in-house bioproduction or outsourcing production to Patheon, to swiftly access the full spectrum of drug R&D products and development services within the Thermo Fisher ecosystem. PPD's clinical services complement Patheon's CDMO offerings by addressing the escalating concerns related to clinical drug logistics in today's more complex clinical trials. This collaboration generates additional business opportunities for both sides and accelerates clinical trial progress, helping clients save R&D costs and expedite the time-to-market for investigational drugs. Furthermore, Thermo Fisher's acquisition of CorEvitas in 2023 bolstered its competency in the real-world study area, a service with a rapidly growing demand in recent years.

As per Thermo Fisher's management, PPD generated ~US\$7bn in revenue in 2022, reflecting an 18% five-year revenue growth CAGR and positioning PPD as the Top3 global clinical CRO companies, alongside IQVIA and ICON. Additionally, revenue of Clinical Research business reached US\$8bn in the trailing twelve months ending 2Q24, according to data disclosed at its 2024 investor day. As one of the world's largest clinical CROs, PPD operates in over 100 countries and collaborates with numerous large pharmaceutical and biotech companies with strong demand for innovation. The geographical footprint and customer profile of PPD closely align with Thermo Fisher's existing global reach and extensive downstream client base, facilitating the realization of synergies.

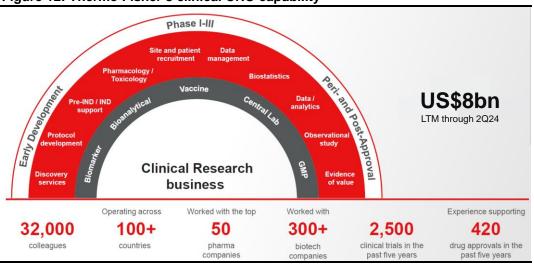


Figure 12: Thermo Fisher's clinical CRO capability

Source: Company data, CMBIGM

Note: Revenue of US\$8bn is based on LTM through 2Q24 before intercompany eliminations. All other data shown above were disclosed from Thermo Fisher 2022 Investor Day held on 18 May 2022.

An efficient integrator in the industry

Thermo Fisher is a proactive consolidator in the global life sciences market. Since the merger of Thermo Electron and Fisher Scientific created the current Thermo Fisher in 2006, the Company has made M&A a core strategy and has been investing significant amounts of resources in this direction. Based on its historical data, Thermo Fisher's total expenditure on M&As accounted for 18% of cumulative revenue and 92% of its cumulative operating net cash flow from 2010 to 2023. Despite the substantial cost of M&A activities, Thermo Fisher remains committed to M&A strategy for future growth. At Thermo Fisher's 2024 Investor Day, its management continued to indicate that 60-75% of capital deployment would be directed towards M&As, leveraging the still highly fragmented global life sciences market for business expansion.



Despite its ambitious M&A execution in the past, Thermo Fisher managed to deliver a consistently growing free cash flow, which provides solid financial support for business expansion. The free cash flow increased from US\$2.2bn in 2014 to US\$7.0bn in 2023, representing a CAGR of 12.1%.

Thermo Fisher's M&A strategy involves both horizontal and vertical consolidation, with acquisitions significantly fuelling the development of all its business segments. In terms of horizontal integration, which involves M&As within the life science tools sector, Thermo Fisher has completed major deals such as the US\$3.5bn acquisition of Phadia (now part of Specialty Diagnostics segment) in 2011, the US\$15.3bn purchase of Life Technology (now part of the Life Sciences Solutions segment) in 2014, the US\$4.1bn acquisition of FEI (now part of the Analytical Instruments segment) in 2016, and the US\$3.1bn acquisition of Olink (now part of the Life Sciences Solutions segment) in 2024.

In recent years, Thermo Fisher has shifted its M&A focus more towards vertical integration. This strategy primarily targets CRO and CDMO companies, which are key customers for the company's life science tools business. Under this plan, Thermo Fisher acquired Patheon, a renowned global CDMO, for US\$7.4bn in 2017, and purchased PPD, one of the world's largest clinical CROs, for US\$16bn in 2021. Combined with Thermo Fisher's rich portfolio of life science tools, these acquisitions allow the Company to cover virtually every aspect of drug research and production, transforming it into a powerful one-stop platform for pharmaceutical customers worldwide.

Additionally, expecting a surge in the global demand for CGT drug research and manufacturing, Thermo Fisher has proactively expanded into this area through acquisitions. In 2019, the Company bought two viral vector CDMO companies, Brammer Bio for US\$1.67bn and Henogen for US0.83bn, creating synergies with Thermo Fisher's instrument and consumables offerings in the CGT domain.

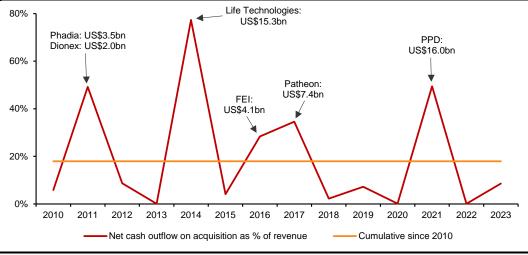


Figure 13: Capital allocated to acquisitions by Thermo Fisher

Source: Company data, CMBIGM

Note: Numbers indicate purchase price disclosed in Thermo Fisher annual reports.



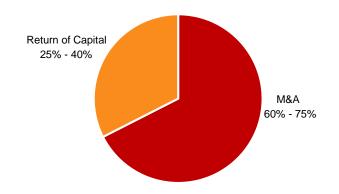
Figure 14: Major M&A deals by Thermo Fisher

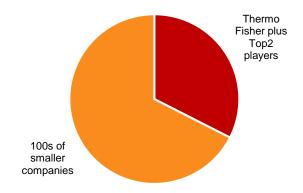
	Life Sciences Solutions	Specialty Diagnostics	Laboratory Products and Biopharma Services	Analytical Instruments
2005			Kendro Laboratory Products US\$837mn	
2006	(F) fish	nerscientific us	\$10.3bn	
2009				B-R-A-H-M-S US\$482mn
2011		Phadia LABORATORY SYSTEMS US\$3.5bn		DIONEX US\$2.0bn
2012		ONE LAMBDA US\$898mn	Doe&ingalis US\$176mn	
2014	life US\$15.3bn			
2015	US\$289mn		Alfa Aesar US\$393mn	
2016	effymetrix US\$1.3bn			FEI US\$4.1bn
2017	Finesse US\$221mn		CPatheon (CDMO) US\$7.4bn	
2018	Advanced Bioprocessing US\$477mn			
2019			brammer () Viral ve US\$1.7bn	ctor CDMO)
2021		(Clinical CRO)	US\$17.4bn US\$1.9bn US\$830mn	/iral vector CDMO)
2023		<mark>₩ Binding Site</mark> US\$2.8bn	COR <mark>EVITAS*</mark> (Real wo US\$913mn	rld Evidence)
2024	Solink US\$3.1bn			

Source: Company data, CMBIGM

Note: Numbers indicate purchase price disclosed in Thermo Fisher annual reports. Contents in red indicate the business focus of acquired companies.

Figure 15: Capital deployment plan of Thermo Fisher Figure 16: Fragmented market for consolidation





Source: Company data, CMBIGM

Note: Data shown above were disclosed from Thermo Fisher 2024 Investor Day held on 19 Sep 2024.

Source: Company data, CMBIGM

Note: Data shown above were disclosed from Thermo Fisher 2023 Investor Day held on 24 May 2023.



The global life sciences industry is characterized by frequent mergers and acquisitions, setting a high bar for any company's capabilities in post-deal business integration. Leveraging its unparalleled global customer reach and leading technological innovations, Thermo Fisher has consistently delivered accelerated growth for its acquired companies, demonstrating its efficient integration capabilities. According to data disclosed at Thermo Fisher 2023 Investor Day, revenue of Life Technologies which was acquired in 2014 (part of the Life Sciences Solutions segment) grew by 260% compared to pre-acquisition levels. Similarly, revenue of Patheon, a CDMO company acquired in 2017 (part of the Laboratory Products and Biopharma Services segment), increased by 230% compared to the scale before the acquisition.

Figure 17: successful M&A examples

	Company acquired	Strategic rationale	Year acquired	Results	
Clear synergy for	life	Established leadership position in enabling life sciences research	2014	Business is ~2.6x larger *	
companies		Added leading electron microscopy offering	2016	Business is ~2.3x larger *	
	Patheon	Expanded CDMO capabilities	2017	Business is ~2.3x larger *	
Industry-lead • Exceptional com • Unique custor	mercial reach mer access	Imatched depth of capabili • Leading innovative technologies • Deep applications expertise Comprehensive biopharma services offe		tainable value creation • Positive societal impact Comprehensive ESG strategy	

nermorisner

SCIENTIFIC

Source: Company data, CMBIGM

Note: * refers to data disclosed in Thermo Fisher 2023 Investor Day held on May 24, 2023

China remains a strategically important market

Thanks to the rapidly growing demand for pharmaceutical R&D and manufacturing, China has become a critical market for Thermo Fisher. According to data released by Thermo Fisher during its 2022 Investor Day, China is the largest single market in the Company's emerging markets, accounting for nearly half (~45%) of total emerging market revenue. In 2022, China contributed 8.4% of Thermo Fisher's total revenue, making it the largest single market outside of the US.

To better capture the long-term growth of China market, Thermo Fisher has locally developed and manufactured products. Despite a slight decrease in the proportion of China revenue in total revenue after 2020, Thermo Fisher's management remains confident and optimistic about the long-term prospects of China market, evidenced by the Company's continuous investment in China. In 2020, the Company inaugurated its largest global customer center in Shanghai and added its first single-use bioprocessing production site in the Asia-Pacific region in Suzhou. In December 2023, Thermo Fisher entered into a cooperation agreement with the government of Sanya city to jointly build a biotech innovation lab.



3.5

12%

10%

8%

6%

4%

2%

0%

3.8

3.4

2.8 ^{8.8%}

China as % of total

Figure 18: Thermo Fisher's revenue split in emerging markets

Figure 19: Thermo Fisher's revenue in China

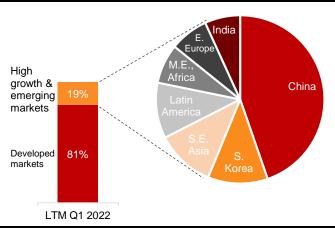
9.5% ^{9.8%}^{10.3%}

2.1

1.7

2.5

2.8



Source: Company data, CMBIGM

Note: Data shown above were disclosed from Thermo Fisher 2022 Investor Day held on 18 May 2022.

Source: Company data, CMBIGM

China

8.1%

1.4

7.2%

1.2

US\$bn

4.0

3.5

3.0

2.5

2.0

1.5

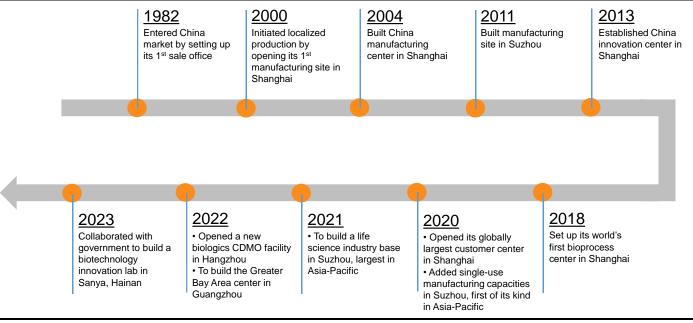
1.0

0.5

Note: According to Thermo Fisher, its China revenue declined by high single digit in 2023. For calculation purpose, we assume an 8% revenue decrease in 2023, accordingly.

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

Figure 20: Thermo Fisher's history in China



Source: Company data, CMBIGM



Large global life sciences market with solid growth drivers

Leading life sciences companies delivered sustainbale growth

Life science companies provide essential instruments, equipment, consumables and related services that support global drug R&D from DNA to commercialization, serving as an indispensable foundation throughout the entire lifecycle of drug R&D. The global life sciences market is vast. Data disclosed by Thermo Fisher during its 2023 Investor Day indicated that the Company serves a market worth US\$240bn with a long-term growth rate of 4-6%. According to Frost & Sullivan, the life science tools market (the major market targeted by Thermo Fisher) was projected to exceed US\$160bn in 2023 and will grow at a CAGR of 10.8% to surpass US\$330bn by 2030. Major players in global upstream life sciences industry are Thermo Fisher, Danaher, Merck KGaA, Agilent and Sartorius.

Despite its large scale, the global life sciences market remains fragmented, offering abundant opportunities for leading companies to expand market share via business consolidation. Data from Thermo Fisher at its 2023 Investor Day showed that the Top2 companies, including Thermo Fisher, held around 33% market share of the global market (see Figure 16). Our analysis indicates that during the period from 2019 to 2023, which included the COVID-19 pandemic period, the revenue CAGR of larger global life science companies did not fall behind that of smaller firms. In fact, the top three life science companies maintained robust revenue growth rates during this period, driven by both external and internal growth. Both Thermo Fisher and Danaher undertook major M&A deals after 2019 - Thermo Fisher's US\$16.0bn acquisition of PPD in 2021 and Danaher's US\$20.7bn acquisition of Cytiva in 2020 - while Merck KGaA recorded a high single-digit CAGR in the same period without major M&A events.

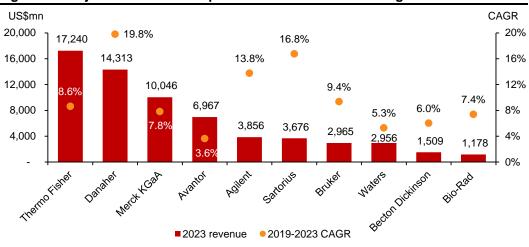


Figure 21: Major life science companies' revenue and revenue growth

Source: Company data, CMBIGM

Note: Revenue indicated in the chart refers to life sciences solutions and analytical instruments segments for Thermo Fisher, life sciences and biotechnology segment for Danaher, life science segment for Merck KGaA, life sciences and applied markets segment for Agilent, biosciences segment for Becton and Dickinson, and life science segment for Bio-Rad. For all the other companies listed above, revenue refers to total revenue. Currency exchange rate of 1.0824 for EUR/USD in 2023 was applied to revenue of Merck KGaA and Sartorius.



Multiple growth drivers bode well for long-term industry outlook

The growth outlook of the global upstream life sciences market is impacted by multiple factors, including global demand for pharmaceutical products, costs associated with drug production, pharmaceutical R&D expenditures by pharmaceutical companies, Capex by pharma companies and CRO and CDMO companies, as well as financing trends within the healthcare industry. Among these factors, pharmaceutical R&D spending, production costs, and Capex are directly linked to the demand for instruments, consumables, and related services provided by life sciences companies.

According to data from Frost & Sullivan (F&S), the global pharmaceutical market is forecasted to surpass US\$2tn by 2030 with a CAGR of 5.4% in 2022-25E and 3.6% in 2025-30E. Driven by increasing complexity in drugs, production costs are expected to grow at a faster pace than the whole pharmaceutical market size. The primary customers of upstream life sciences companies include pharmaceutical companies (both pharma and biotech companies), CRO and CDMO (collectively, CXO) companies, government agencies, and academic research institutions. According to our calculation, during 2011 to 2023, global top-tier pharma companies' R&D expenditures and Capex grew steadily, with noticeable acceleration following the outbreak of the COVID-19 pandemic in 2020. Similarly, global leading biotech companies have made sustained investments in both R&D and Capex in the past decade.

The CXO sector has seen growing demand from the pharmaceutical industry for outsourced R&D and manufacturing due to its excellent efficiency and service quality. Consequently, CXO companies have ambitiously increased their Capex to match the rising outsourcing demand. While we have observed a decline in Capex among global top CXO companies since 2023 (primarily due to China-based firms), we consider this to be a temporary setback and believe that the CXO sector will continue investing in capabilities and capacities in the long run.

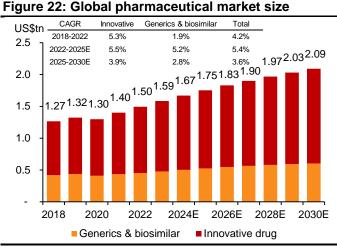
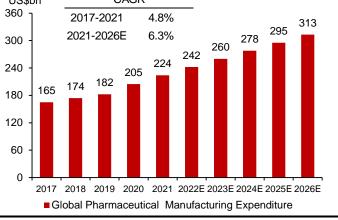


Figure 23: Global pharmaceutical manufacturing expenditure US\$bn CAGR

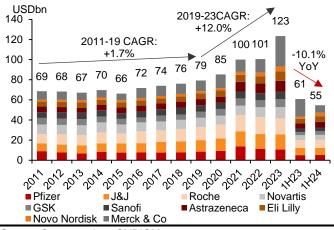


Source: F&S, CMBIGM

Source: F&S, CMBIGM

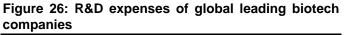


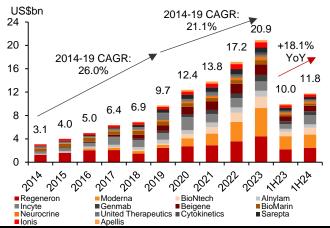
Figure 24: R&D expenses of global major pharma companies



Source: Company data, CMBIGM

Note: 7 out of the 10 selected pharma companies increased R&D expenses in 1H24 over 1H23.





Source: Company data, CMBIGM

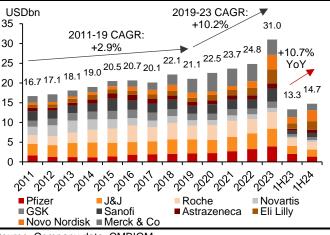
Note: 11 out of the 14 selected biotech companies increased R&D expenses in 1H24 over 1H23.

USDbn -20.0% 8 YoY 2016-2022 CAGR: 6.1 6.0 33.2% 6 -30.1% 4.3 YoY 4 3.1 3 2.5 2.1 2.2 1.3 2 0 2016 2017 2018 2019 2020 2021 2022 2023 1H23 1H24 IQVIA Siegfried Charles River Lonza Samsung Bio WuXi AppTec WuXi Bio Catalent Pharmaron ■Asymchem

Figure 28: Capex of global major CXO companies

Note: Only 2 out of the 10 selected CXO companies increased Capex in 1H24 over 1H23.

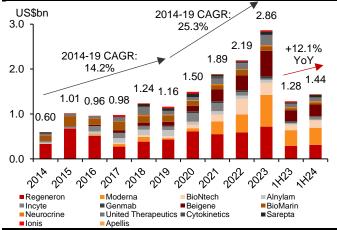
Figure 25: Capex of global major pharma companies



Source: Company data, CMBIGM

Note: 7 out of the 10 selected pharma companies increased Capex in 1H24 over 1H23.

Figure 27: Capex of global leading biotech companies



Source: Company data, CMBIGM

Note: 9 out of the 14 selected biotech companies increased Capex in 1H24 over 1H23.

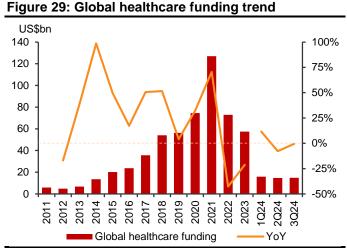
Source: Company data, CMBIGM



Funding environment for drug innovation is resilient. Global healthcare financing trends reflect the R&D and manufacturing needs of biotech companies, which are currently the major force driving pharmaceutical innovation in the global market. According to VBDATA, global healthcare funding has generally maintained an upward trend over the past decade, with exceptional growth in 2020 and 2021 driven by the COVID-19 pandemic. Although funding experienced significant declines in 2022 and 2023, early signs of recovery have been observed in late 2023 and 2024. With expectations that the US Federal Reserve has entered a rate-cutting phase, we anticipate that global financing for innovative drugs will soon resume its growth trajectory, supporting sustained investment in pharmaceutical R&D and manufacturing capacities.

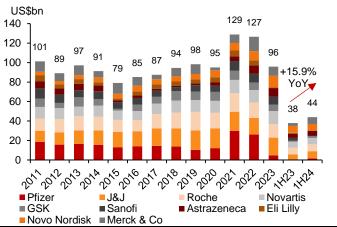
Furthermore, the business model where large pharma companies license in innovative drugs from biotech companies has consistently been a crucial source of funding for global pharmaceutical R&D innovation. Our analysis of the free cash flow (defined as the net operating cash flow minus Capex) of global major pharma companies from 2011 to 2023 reveals that big pharma's free cash flow was in a steady upward path from 2015 to 2019. The COVID-19 pandemic led to a substantial increase in revenues and net operating cash flows for big pharmas, allowing them to have more funds available for investments. From 2021 to 2023, a decline in free cash flow of big pharmas was observed, which we think was largely linked to their growing R&D expenditures and Capex. Nonetheless, the free cash flow of big pharmas remained at historic highs in 2023, setting a robust foundation for external investment. Thus, we believe global big pharmas will continue to act as a steady source of funding for pharmaceutical innovations.

Moreover, the financial position of biotech companies improved in 2023. We observed that the cash runway for the global top biotech companies in 2023 stood above the historical level, supported by sales of drugs and successful fundraising during the COVID-19 pandemic. We expect that the leading biotech companies will have adequate capital to support their long-term R&D goals.



Source: VBDATA, CMBIGM

Figure 30: Free cash flow of global major pharma companies

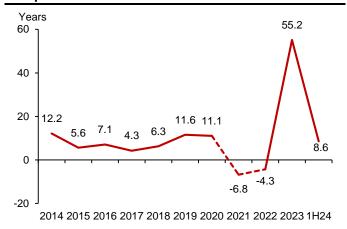


Source: Company data, CMBIGM

Note: 7 out of the 10 selected pharma companies saw positive growth in their free cash flows in 1H24 over 1H23.



Figure 31: Cash runway of global leading biotech companies



Source: Company data, CMBIGM Note: Negative data with dashed line indicate positive net cash flow from operating and investing activities. Companies included in our calculation are the same as Figure 26.

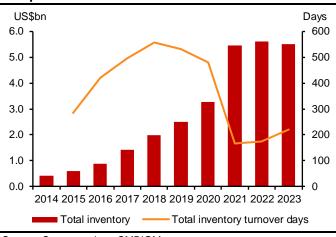
Downstream destocking is likely to approach an end by the end of 2024

The global pharmaceutical industry grappled with inflated inventory levels in the aftermath of the COVID-19 pandemic. However, we anticipate that the industry will likely finalize inventory destocking by the end of 2024. Driven by optimistic forecasts of medicine demand and concerns about enduring supply chain disruptions due to the COVID-19 pandemic, downstream customers (i.e., pharmaceutical companies and CXO companies) accumulated substantial quantities of raw materials for production in 2021. However, upon recognizing that actual demand fell short of expectations, the customers adopted a more cautious inventory management strategy. As a result, inventory levels remained relatively stable in 2022 and 2023, though still at historical highs.

Management from several leading upstream life science companies have indicated that downstream customers' inventories are returning to normal levels. We believe that the destocking efforts in 2023 and 1H24 may help the pharmaceutical R&D sector revert to a regular procurement schedule by the end of 2024. This transition will catalyze the normalization of sales of products and services in the upstream life sciences sector.

Figure 32: Inventory of global major pharma Figure 33: Inventory of global leading companies US\$bn Days US\$bn





Note: Companies included in our calculation are the same as Figure 24.

Source: Company data, CMBIGM

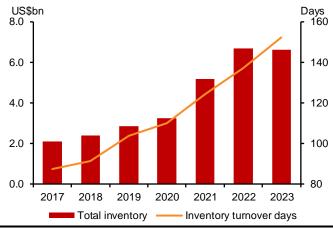
Note: Companies included in our calculation are the same as Figure 26.

biotech

Source: Company data, CMBIGM



Figure 34: Inventory of global major CXO companies



Source: Company data, CMBIGM

Note: Companies included in our calculation are the same as Figure 28.

M&A is an universal route to grow

The global upstream life sciences industry is characterized by various key competitive factors, including diverse product portfolios, large customer bases, first-mover advantages, economies of scale, and the rapid advancement of technology. As a result, these features make M&A a crucial strategy for upstream life science companies to enhance their competitiveness and capture market share.

We have observed that M&A is the core development strategy for many leading upstream life science firms, with a significant proportion of capital allocated to this approach. For instance, Thermo Fisher plans to allocate 60-75% of its capital to acquisitions to better leverage the still fragmented global life sciences market. Sartorius, a leading Germanbased life science provider, views acquisitions as one of the three pillars of its innovation strategy and expects M&As to contribute 20% of its revenue growth from 2023 to 2028. Historically, Thermo Fisher, Danaher, and Sartorius have spent 18%, 29%, and 21%, respectively, of their cumulative revenues from 2014 to 2023 on acquisitions. We anticipate that M&A will continue to play a significant role in the long-term development of the upstream life sciences industry.

Given the strategic importance of M&A, mega-scale acquisitions are frequent in the global life sciences sector. Notable examples include: Thermo Fisher acquired Life Technology for US\$15.3bn in 2014; Danaher purchased Pall for US\$13.6bn in 2015 and Cytiva for US\$20.7bn in 2020; Merck KGaA bought Millipore for US\$7.2bn in 2010 and Sigma-Aldrich for EUR15.6bn in 2015. Moreover, as the global demand for CGT R&D and manufacturing has surged in recent years, upstream life science companies have acted quickly to use M&A to enter this field. For instance, Thermo Fisher acquired Brammer Bio, a viral vector CDMO company, for US\$1.67bn in 2019. Sartorius purchased CGT supplier Polyplus for EUR2.2bn in 2023, marking the largest acquisition in Sartorius's history.

These bolt-on acquisitions underscore the importance of M&A in rapidly enhancing the capabilities of upstream life science companies. As the life sciences landscape evolves, M&A will remain a key tool for companies looking to innovate, diversify, and achieve scale in the increasingly complex and dynamic industry.

Net cash outflow on acquisition as % of revenue Cumulative since 2014

Figure 35: Spending on M&As of Thermo Fisher

Patheon:

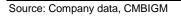
US\$7.4bn

PPD:

US\$16.0bn

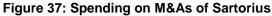
Life Technologies:

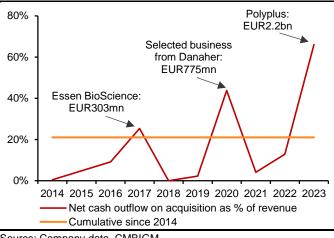
US\$15.3bn

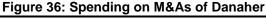


FEI:

US\$4.1bn







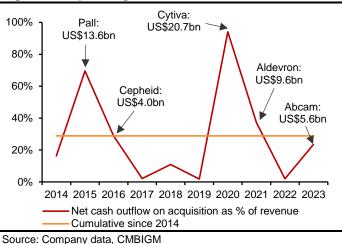
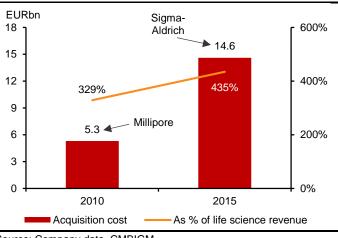


Figure 38: Spending on M&As of the life science business of Merck KGaA



Source: Company data, CMBIGM

Source: Company data, CMBIGM

Thermo Fisher expands more aggressively to the downstream

Products and services provided by upstream life science companies span the entire lifecycle of drug R&D from DNA to commercialization. This allows those companies to establish business relationships with drug R&D companies or institutions at an early stage. which makes it easier to foster a sticky bond with customers. It also lays a solid groundwork for upstream life science companies to expand their businesses downstream. Thermo Fisher has expanded aggressively to the downstream through acquisitions. In 2017, Thermo Fisher acquired Patheon, one of the world's leading CDMO service providers. In 2021, Thermo Fisher took over PPD, a global top-tier clinical CRO. The acquisitions of Patheon and PPD have substantially enhanced Thermo Fisher's capabilities covering all aspects of drug R&D value chain. Aside from Thermo Fisher, another global life science player, Agilent, completed its US\$925mn acquisition of Biovectra, a Canada-based CDMO providing biologics and small-molecule services, in Sep 2024. The acquisition marked the first vertical integration attempt in the history of Agilent.

However, vertical integration demands a greater level of business integration capabilities. indicating that not all upstream life science firms have the expertise or resources to undertake such strategy. The current state of industry development underscores this reality. Among the global leaders in the upstream life science sector, only Thermo Fisher has a long history of effectively implementing vertical integrations. In contrast, most peers

80%

60%

40%

20%

0%



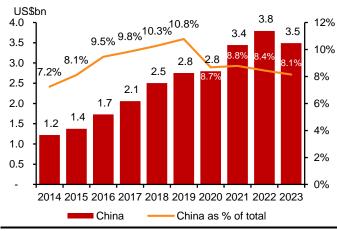
concentrate on horizontal integration as their primary strategic approach. We posit that Thermo Fisher's proficiency in vertical integration sets it apart from industry rivals, granting the Company a distinctive positioning that bolsters its competitive standing in the worldwide life sciences sector.

Continued investment in China market

Owing to the rapidly increasing demand for pharmaceutical research and development, the China market has emerged as a critical endpoint for global upstream life science companies. Major players in the global life sciences industry have already established a significant presence in China. In 2023, the China market accounted for 8.1%, 13.2%, and 8.1% of the total revenue for Thermo Fisher, Danaher, and Sartorius, respectively. For both Thermo Fisher and Danaher, China is the largest market outside the US. For Sartorius, it is the largest beyond the US and German markets.

Although there was a slight decrease in the revenue share from China in 2023, we do not anticipate any fundamental shifts in the long-term perspectives that major life science companies maintain towards the China market. Leading upstream life science firms continue to invest in and cultivate the market. For instance, Thermo Fisher announced a partnership with Sanya, Hainan in December 2023 to collaboratively develop a biotechnology innovation sharing platform. In January 2024, Danaher solidified a partnership with the Changping area of Beijing, to establish Danaher's Northern Headquarters.

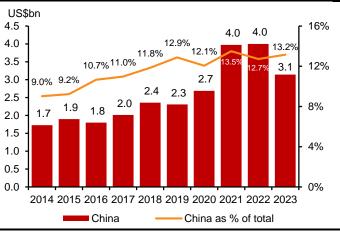
Figure 39: Revenue from China for Thermo Fisher



Source: Company data, CMBIGM

Note: According to Thermo Fisher, its China revenue declined by high single digit in 2023. For calculation purpose, we assume an 8% revenue decrease in 2023, accordingly.

Figure 40: Revenue from China for Danaher



Source: Company data, CMBIGM



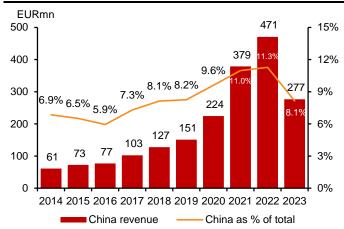
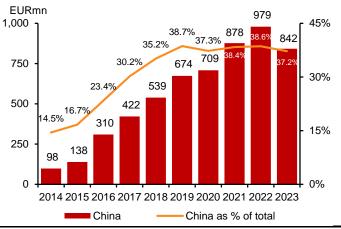


Figure 41: Revenue from China for Sartorius

Source: Company data, CMBIGM

Figure 42: Revenue from China for the life science business of Merck KGaA



Source: Company data, CMBIGM

Note: China life science revenue as % of total life science revenue refers to China revenue as % of total Merck KGaA revenue, due to limited data availability.



Financial analysis

Expect revenue to grow at CAGR of 4.7% in 2023-26E

Driven by a surge in demand stemming from the COVID-19 pandemic and mergers & acquisitions (primarily PPD), Thermo Fisher experienced brisk revenue growth from 2019 to 2023, with a CAGR of 13.8%. Revenue experienced a 4.6% dip in 2023, largely due to a significant pullback in COVID-19 related demand and softer non-COVID-19 R&D demand amidst a weak biotech funding environment.

Nonetheless, given the robust demand from pharmaceutical companies, the diminishing impact from the COVID-19 related revenue, and the rate cuts by the US Federal Reserve predicted to bolster biotech funding, we forecast Thermo Fisher to rebound with positive growth momentum starting in 2024. We project that revenue will reach US\$43.0bn/ 45.5bn/ 49.2bn in 2024E/ 25E/ 26E, representing +0.4%/ +5.6%/ +8.3% YoY growth for respective years and a CAGR of 4.7% during this period.

By segment, revenue growth of both the Life Sciences Solutions and Specialty Diagnostics segments was closely linked to the fluctuations in COVID-19 demand during the pandemic. We anticipate that Life Sciences Solution will continue to see a year-on-year revenue decline in 2024, albeit to a significantly lesser degree than in 2023. However, we see revenue of Specialty Diagnostics to be firmly supported by rapidly-growing demand in services like transplant diagnostics and immunodiagnostics in 2H24E, thus delivering a positive growth in 2024E. Acknowledging the robust demand in the long term, we predict that these two segments will demonstrate positive growth in 2025E and 2026E. The Analytical Instruments segment will sustain its steady growth momentum from 2024 to 2026E, owing to the consistent demand from the industrial and applied markets (including semiconductor and materials science industries). We anticipate that the Laboratory Products and Biopharma Services segment will witness a notable recovery in 2025-26E, as the CDMO and clinical CRO businesses will assume a more significant role in the burgeoning global outsourcing market.

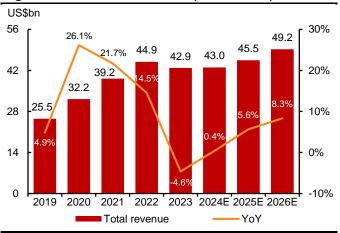
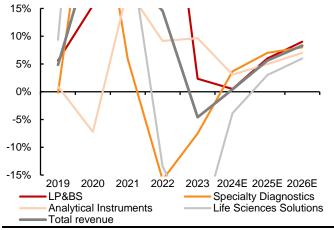


Figure 43: Revenue forecasts (2019-2026E)

Source: Company data, CMBIGM estimates

Figure 44: Revenue growth forecasts by segment (2019-2026E)

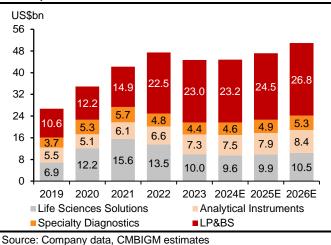


Source: Company data, CMBIGM estimates

Note: LP&BS stands for Laboratory Products and Biopharma Services.

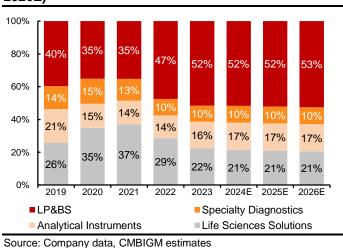


Figure 45: Revenue forecasts by segment (2019-2026E)



Note: Not excluding inter-segment elimination.

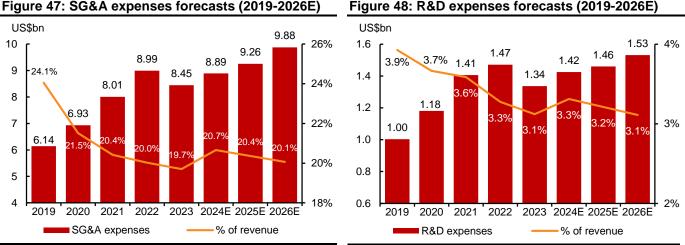
Figure 46: Revenue split by business segment (2019-2026E)



Note: Not excluding inter-segment elimination.

Expect operating margin to be maintained at pre-pandemic levels

We expect the operating expenses as % of revenue of Thermo Fisher to continuously decrease in 2024-26E, driven by the improved cost efficiency from the Company's Practical Process Improvement (PPT) business system, economies of scale and synergy realization from M&As. We project its SG&A expense to sales ratio to maintain at around 20.4% and R&D expense to sales ratio to stay at around 3.2% in 2024-26E.



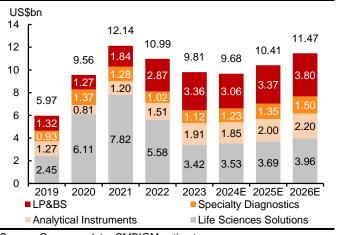
Source: Company data, CMBIGM estimates

Source: Company data, CMBIGM estimates

Thermo Fisher's non-GAAP operating margin saw significant enhancement during the COVID-19 pandemic, increasing from 23.4% in 2019 to 29.7% and 31.0% in 2020 and 2021, respectively. This margin began to trend downwards in 2022 and 2023, primarily due to the decline in COVID-19 related revenue and price erosion for volume pull-through, as well as the company's investments in strategic growth initiatives. We forecast that the non-GAAP operating margin will revert to its pre-pandemic levels (approximately 23%) in the period from 2024 to 2026E, mainly driven by demand recovery.



Figure 49: Non-GAAP operating income forecasts (2019-2026E)



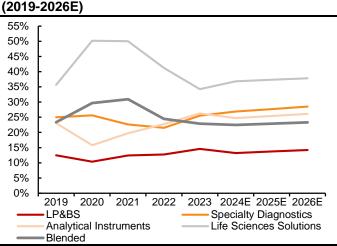


Figure 50: Non-GAAP operating margin forecasts

Source: Company data, CMBIGM estimates

Source: Company data, CMBIGM estimates

We project that Thermo Fisher's adjusted net income will resume positive growth in 2025E and 2026E, following a slight decline in 2024E. We anticipate that the Company's adjusted net income will reach US\$8.3bn/ 8.8bn/ 9.7bn in 2024E/ 25E/ 26E, representing YoY growth of -1.0%/ +5.7%/ +10.4%, respectively. Meanwhile, we predict that Thermo Fisher will continue to generate robust free cash flow (defined as net cash flow from operating activities minus capital expenditures) from 2024 to 2026E. This solid financial base will support the Company's M&A strategy.

Figure 51: Adjusted net income forecasts (2019-2026E)

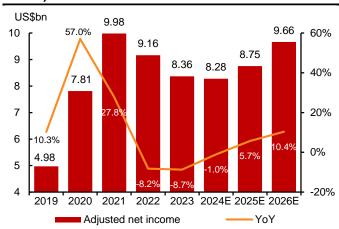
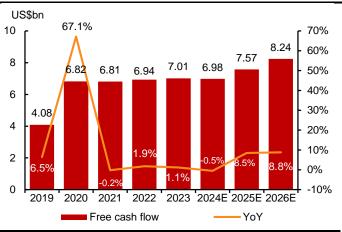


Figure 52: Free cash flow forecasts (2019-2026E)



Source: Company data, CMBIGM estimates

Source: Company data, CMBIGM estimates

Figure 53: P&L forecasts (2019-2026E)



(YE 31 Dec) US\$bn	2019	2020	2021	2022	2023	2024E	2025E	2026E
Revenue	25.5	32.2	39.2	44.9	42.9	43.0	45.5	49.2
YoY	4.9%	26.1%	21.7%	14.5%	-4.6%	0.4%	5.6%	8.3%
Cost of goods sold	(14.2)	(16.2)	(19.6)	(25.9)	(25.8)	(25.6)	(26.7)	(28.5)
% of revenue	-55.6%	-50.3%	-49.9%	-57.8%	-60.1%	-59.5%	-58.7%	-57.9%
Gross Profit	11.3	16.0	19.6	19.0	17.1	17.4	18.8	20.7
GPM	44.4%	49.7%	50.1%	42.2%	39.9%	40.5%	41.3%	42.1%
SG&A expenses	(6.1)	(6.9)	(8.0)	(9.0)	(8.4)	(8.9)	(9.3)	(9.9)
% of revenue	-24.1%	-21.5%	-20.4%	-20.0%	-19.7%	-20.7%	-20.4%	-20.1%
R&D expenses	(1.0)	(1.2)	(1.4)	(1.5)	(1.3)	(1.4)	(1.5)	(1.5)
% of revenue	-3.9%	-3.7%	-3.6%	-3.3%	-3.1%	-3.3%	-3.2%	-3.1%
Restructuring and other costs (income), net	0.4	(0.1)	(0.2)	(0.1)	(0.5)	(0.2)	(0.4)	(0.4)
% of revenue	1.6%	-0.3%	-0.5%	-0.3%	-1.1%	-0.5%	-0.9%	-0.8%
Operating Income	4.6	7.8	10.0	8.4	6.9	6.9	7.7	8.9
Operating margin	18.0%	24.2%	25.6%	18.7%	16.0%	16.0%	16.8%	18.1%
Interest Income	0.2	0.1	0.0	0.3	0.9	1.0	0.7	0.6
% of revenue	0.9%	0.2%	0.1%	0.6%	2.1%	2.3%	1.5%	1.2%
Interest Expense	(0.7)	(0.6)	(0.5)	(0.7)	(1.4)	(1.4)	(1.3)	(1.2)
% of revenue	-2.6%	-1.7%	-1.4%	-1.6%	-3.2%	-3.2%	-2.8%	-2.5%
Other Items, Net	(0.1)	(0.1)	(0.7)	(0.1)	(0.1)	0.0	(0.1)	(0.1)
% of revenue	-0.3%	-0.3%	-1.8%	-0.2%	-0.2%	0.1%	-0.1%	-0.1%
Income before income taxes	4.1	7.2	8.8	7.8	6.3	6.5	7.0	8.3
% of revenue	15.9%	22.4%	22.5%	17.4%	14.7%	15.2%	15.4%	16.8%
Provision for income taxes	(0.4)	(0.9)	(1.1)	(0.7)	(0.3)	(0.7)	(0.7)	(0.8)
% of revenue	-1.5%	-2.6%	-2.8%	-1.6%	-0.7%	-1.5%	-1.5%	-1.7%
Equity in earnings/(losses) of unconsolidated entities	0.0	0.0	(0.0)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)
Net income from continuing operations	3.7	6.4	7.7	7.0	6.0	5.8	6.2	7.3
% of revenue	14.5%	19.8%	19.7%	15.5%	13.9%	13.4%	13.6%	14.9%
(Loss) Gain from discontinued operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	3.7	6.4	7.7	7.0	6.0	5.8	6.2	7.3
% of revenue	14.5%	19.8%	19.7%	15.5%	13.9%	13.4%	13.6%	14.9%
Less: non-controlling interests	0.0	0.0	(0.0)	(0.0)	0.0	(0.0)	(0.0)	(0.0)
Attributable net income	3.7	6.4	7.7	7.0	6.0	5.7	6.2	7.3
NIM	14.5%	19.8%	19.7%	15.5%	14.0%	13.3%	13.6%	14.8%
YoY	25.8%	72.5%	21.2%	-10.0%	-13.7%	-4.3%	7.4%	18.5%
Adjusted net income	5.0	7.8	10.0	9.2	8.4	8.3	8.8	9.7
Adjusted NIM	19.5%	24.2%	25.4%	20.4%	19.5%	19.2%	19.3%	19.6%
YoY	10.3%	57.0%	27.8%	-8.2%	-8.7%	-1.0%	5.7%	10.4%

Source: Company data, CMBIGM estimates



Valuation

We derive a TP of US\$670.00 on a 10-year DCF valuation with WACC of 6.12% and terminal growth rate of 2.0%. We are confident in the long-term prospects of Thermo Fisher as a global leader in the life sciences industry, backed by its economies of scale, strong industry consolidation capabilities and its end-to-end platform amid the expected industry turnaround in client destocking and biotech funding.

Figure 54: DCF valuation of Thermo Fisher

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DCF Valuation (in US\$bn)		2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E
EBIT		6.9	7.6	8.9	9.9	11.0	12.1	13.3	14.6	15.9	17.3
Tax rate		10.2%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
EBIT*(1-tax rate)		6.2	6.8	8.0	8.9	9.9	10.9	12.0	13.2	14.3	15.6
+ D&A		3.4	3.2	3.0	3.3	3.6	4.0	4.3	4.6	5.0	5.3
 Change in working capital 		(0.1)	(0.6)	(0.9)	(1.0)	(1.1)	(1.2)	(1.3)	(1.4)	(1.5)	(1.6)
- Capex		(5.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)
FCFF		4.1	6.1	6.7	7.9	9.1	10.3	11.7	13.0	14.5	15.9
Terminal value											394.7
Terminal growth rate	2.00%										
WACC	6.12%										
Cost of equity	8.40%										
Cost of debt	3.00%										
Equity beta	0.80										
Risk free rate	4.00%										
Market risk premium	5.50%										
Target debt to asset ratio	40.00%										
Effective corporate tax rate	10.00%										
PV of terminal value (US\$bn)	217.9										
Total PV (US\$bn)	286.1										
Net debt (US\$bn)	29.5										
Non-controlling interest (US\$bn)	0.0										
Equity value (US\$bn)	256.6 383										
# of shares (mn)	383 670.00										
Price per share (US\$)	070.00										
Source: CMBIGM estimates											

Figure 55: Valuation range based on sensitivity analysis

				<u> </u>		
Price per share (US\$)				WACC		
		5.12%	5.62%	6.12%	6.62%	7.12%
	3.0%	1,339.11	1,053.41	859.71	719.88	614.28
Terminal	2.5%	1,100.05	897.77	751.75	641.51	555.41
growth	2.0%	937.62	785.12	670.00	580.10	508.03
rate	1.5%	820.06	699.81	605.94	530.69	469.09
	1.0%	731.03	632.97	554.39	490.07	436.51

Source: CMBIGM estimates

Figure 56: CMBIGM estimates vs consensus

		CMBIGM		(Consensus			Diff (%)	
US\$ mn	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E	FY24E	FY25E	FY26E
Revenue	43,033	45,457	49,234	42,782	45,082	48,291	0.59%	0.83%	1.95%
Gross profit	17,423	18,768	20,743	17,935	18,973	20,434	-2.85%	-1.08%	1.51%
Operating profit	6,901	7,653	8,934	9,673	10,419	11,409	-28.66%	-26.55%	-21.69%
Non-GAAP net profit	8,278	8,752	9,662	8,317	8,908	9,829	-0.47%	-1.75%	-1.70%
Non-GAAP EPS (US\$)	21.61	23.21	26.03	21.69	23.49	26.21	-0.36%	-1.21%	-0.68%
Gross margin	40.49%	41.29%	42.13%	41.92%	42.09%	42.31%	-1.43ppt	-0.80ppt	-0.18ppt
Operating margin	16.04%	16.84%	18.15%	22.61%	23.11%	23.63%	-6.57ppt	-6.28ppt	-5.48ppt
Non-GAAP net margin	19.24%	19.25%	19.62%	19.44%	19.76%	20.35%	-0.20ppt	-0.51ppt	-0.73ppt

Source: Company data, Bloomberg, CMBIGM estimates

Figure 57: Global peer valuation

Company	Ticker	Rating	Mkt Cap	Revenue CAGR	Net income CAGR		P/E (x)		PEG (x)	PB (x)	ROE	Div. yield
			US\$bn	23-26E	23-26E	24E	25E	26E	24E	24E	24E	24E
Overseas												
Thermo Fisher	TMO US	BUY	194.7	4.7%	4.9%	23.6	21.9	19.6	4.8	4.0	16.8%	0.3%
Danaher	DHR US	NR	166.7	4.2%	6.8%	30.8	27.5	24.5	4.5	3.2	9.9%	0.5%
Samsung Bio	207940 KS	NR	47.9	17.2%	20.4%	64.8	53.9	44.9	3.2	6.1	10.0%	0.0%
Lonza	LONN SW	NR	42.6	9.2%	15.1%	37.9	31.6	26.4	2.5	4.0	9.6%	0.9%
IQVIA	IQV US	NR	34.7	4.5%	8.3%	17.2	15.9	14.1	2.1	5.1	28.0%	0.0%
LabCorp	LH US	NR	19.8	5.8%	6.9%	16.3	14.8	13.5	2.4	2.4	15.3%	1.2%
ICON	ICLR US	NR	16.1	3.7%	9.0%	14.0	13.0	11.6	1.5	1.6	10.4%	0.0%
Sartorius	SRT GR	NR	15.1	5.7%	9.0%	42.9	34.5	26.7	4.8	3.2	11.1%	0.4%
Catalent	CTLT US	NR	10.7	5.3%	20.8%	nm	52.5	33.5	na	2.8	0.6%	0.0%
Medpace	MEDP US	NR	9.8	9.9%	16.3%	26.4	25.1	22.1	1.6	10.0	49.7%	0.0%
Charles River	CRL US	NR	9.5	1.8%	1.3%	18.3	18.0	16.1	13.9	2.4	13.3%	0.0%
Bachem	BANB SW	NR	5.7	19.9%	19.4%	42.6	34.8	26.4	2.2	3.6	8.8%	1.3%
Overseas average				7.7%	11.5%	30.4	28.6	23.3	3.9	4.0	15.3%	0.4%
China												
WuXi AppTec	603259 CH	BUY	20.7	6.9%	7.5%	14.6	13.0	11.3	1.9	2.6	16.9%	1.9%
WuXi Biologics	2269 HK	BUY	8.2	9.7%	6.3%	13.2	11.8	10.5	2.1	1.3	11.3%	0.0%
Tigermed	300347 CH	BUY	7.2	6.5%	5.7%	44.4	40.2	32.3	7.8	2.6	5.8%	0.7%
Pharmaron	300759 CH	NR	6.4	10.1%	11.1%	27.4	26.5	22.6	2.5	3.6	13.4%	0.8%
Joinn	6127 HK	BUY	1.8	3.5%	-9.9%	80.8	31.2	19.8	na	0.9	1.0%	0.4%
Asymchem	002821 CH	NR	4.4	-0.9%	-11.2%	31.9	25.7	20.5	na	1.8	5.7%	0.9%
China average				6.0%	1.6%	35.4	24.7	19.5	3.6	2.1	9.0%	0.8%

Source: Bloomberg, CMBIGM

Note: Data of Thermo Fisher, WuXi AppTec, WuXi Bio, Tigermed and Joinn are based on CMBIGM forecasts, while data of other companies are based on Bloomberg consensus as of 20 Nov 2024.

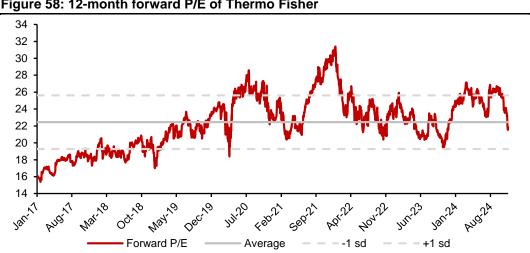


Figure 58: 12-month forward P/E of Thermo Fisher

Source: Bloomberg, CMBIGM. As of 20 Nov 2024.



Risks to our rating and target price

1) Uncertainties in the recovery trend of global biotech funding and demand from biotech clients.

2) Uncertainties in the demand recovery trend of global mid- and large-size pharmaceutical companies amid the challenging macro and geopolitical environment.

3) Worse-than-expected business integration on companies acquired by Thermo Fisher.

4) Thermo Fisher's incompetency in bringing innovative products to meet clients' R&D requirements.



Financial Summary

INCOME STATEMENT	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec (US\$ mn)						
Revenue	39,211	44,915	42,857	43,033	45,457	49,234
Cost of goods sold	(19,573)	(25,944)	(25,757)	(25,610)	(26,688)	(28,491)
Gross profit	19,638	18,971	17,100	17,423	18,768	20,743
Operating expenses	(9,610)	(10,578)	(10,241)	(10,522)	(11,116)	(11,809)
SG&A expense	(8,007)	(8,993)	(8,445)	(8,891)	(9,256)	(9,877)
R&D expense	(1,406)	(1,471)	(1,337)	(1,425)	(1,460)	(1,532)
Others	(197)	(114)	(459)	(206)	(400)	(400)
Operating profit	10,028	8,393	6,859	6,901	7,653	8,934
Interest income	43	272	879	995	673	585
Interest expense	(536)	(726)	(1,375)	(1,383)	(1,282)	(1,206)
Other income/expense	(694)	(104)	(65)	30	(60)	(60)
Pre-tax profit	8,841	7,835	6,298	6,543	6,984	8,252
Income tax	(1,109)	(703)	(284)	(664)	(698)	(825)
Others	(4)	(172)	(59)	(122)	(100)	(100)
After tax profit	7,728	6,960	5,955	5,757	6,185	7,327
Minority interest	(3)	(10)	40	(20)	(21)	(25)
Net profit	7,725	6,950	5,995	5,737	6,164	7,302
Adjusted net profit	9,978	9,159	8,364	8,278	8,752	9,662
Gross dividends	410	470	463	600	645	764
BALANCE SHEET	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec (US\$ mn)						
Current assets	20,113	25,229	24,589	26,513	30,330	35,107

re si Dec (03\$ mm)						
Current assets	20,113	25,229	24,589	26,513	30,330	35,107
Cash & equivalents	4,477	8,524	8,077	7,654	10,779	14,451
Account receivables	7,977	8,115	8,221	8,253	8,718	9,442
Inventories	5,051	5,634	5,088	5,403	5,630	6,011
Prepayment	0	0	0	0	0	0
Other current assets	1,640	1,644	1,760	3,760	3,760	3,760
Contract assets	968	1,312	1,443	1,443	1,443	1,443
Non-current assets	75,010	71,925	74,137	76,161	76,354	76,733
PP&E	8,333	9,280	9,448	9,882	10,274	10,629
Intangibles	20,113	17,442	16,670	15,460	13,861	12,485
Goodwill	41,924	41,196	44,020	46,820	48,220	49,620
Other non-current assets	4,640	4,007	3,999	3,999	3,999	3,999
Total assets	95,123	97,154	98,726	102,674	106,684	111,839
Current liabilities	13,436	17,010	14,012	15,297	15,830	16,453
Short-term borrowings	2,537	5,579	3,609	4,609	5,009	5,409
Account payables	2,867	3,381	2,872	3,157	3,290	3,513
Other current liabilities	5,377	5,449	4,842	4,842	4,842	4,842
Contract liabilities	2,655	2,601	2,689	2,689	2,689	2,689
Non-current liabilities	40,832	36,112	37,990	38,190	38,790	39,390
Long-term borrowings	32,333	28,909	31,308	32,508	33,308	34,108
Other non-current liabilities	8,499	7,203	6,682	5,682	5,482	5,282
Total liabilities	54,268	53,122	52,002	53,487	54,620	55,843
Share capital	439	441	442	442	442	442
Capital surplus	16,174	16,743	17,286	17,286	17,286	17,286
Retained earnings	35,431	41,910	47,364	52,806	58,662	65,570
Other reserves	(11,251)	(15,116)	(18,357)	(21,357)	(24,357)	(27,357)
Total shareholders equity	40,793	43,978	46,735	49,177	52,033	55,941
Minority interest	62	54	(11)	9	30	56
Total equity and liabilities	95,123	97,154	98,726	102,674	106,684	111,839



CASH FLOW	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec (US\$ mn)						
Operating						
Profit before taxation	8,841	7,835	6,298	6,543	6,984	8,252
Depreciation & amortization	2,592	3,381	3,406	3,376	3,207	3,021
Tax paid	(1,109)	(703)	(284)	(664)	(698)	(825)
Change in working capital	(1,548)	(1,049)	(537)	(61)	(560)	(883)
Others	536	(310)	(477)	(816)	36	70
Net cash from operations	9,312	9,154	8,406	8,377	8,969	9,636
Investing						
Capital expenditure	(2,523)	(2,243)	(1,479)	(1,400)	(1,400)	(1,400)
Acquisition of subsidiaries/ investments	(19,395)	(39)	(3,660)	(4,000)	(2,000)	(2,000)
Others	(14)	123	(3)	(2,000)	0	0
Net cash from investing	(21,932)	(2,159)	(5,142)	(7,400)	(3,400)	(3,400)
Financing						
Dividend paid	(395)	(455)	(523)	(600)	(645)	(764)
Net borrowings	8,911	654	(155)	2,200	1,200	1,200
Proceeds from share issues	0	0	0	0	0	0
Share repurchases	(2,000)	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)
Others	65	(9)	56	0	0	0
Net cash from financing	6,581	(2,810)	(3,622)	(1,400)	(2,445)	(2,564)
Net change in cash						
Cash at the beginning of the year	10,336	4,491	8,537	8,077	7,654	10,779
Exchange difference	194	(139)	(82)	0	0	0
Cash at the end of the year	4,491	8,537	8,097	7,654	10,779	14,451
GROWTH	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec						
Revenue	21.7%	14.5%	(4.6%)	0.4%	5.6%	8.3%
Gross profit	22.7%	(3.4%)	(9.9%)	1.9%	7.7%	10.5%
Operating profit	28.7%	(16.3%)	(18.3%)	0.6%	10.9%	16.7%
Net profit	21.2%	(10.0%)	(13.7%)	(4.3%)	7.4%	18.5%
Adj. net profit	27.8%	(8.2%)	(8.7%)	(1.0%)	5.7%	10.4%
PROFITABILITY	2021A	2022A	2023A	2024E	2025E	2026E
YE 31 Dec	== /0/	10.00/		40 504		10.101
Gross profit margin	50.1%	42.2%	39.9%	40.5%	41.3%	42.1%
Operating margin	25.6%	18.7%	16.0%	16.0%	16.8%	18.1%
Adj. net profit margin	25.4%	20.4%	19.5%	19.2%	19.3%	19.6%
Return on equity (ROE) GEARING/LIQUIDITY/ACTIVITIES	20.5% 2021A	16.4% 2022A	13.2% 2023A	12.0% 2024E	12.2% 2025E	13.5% 2026E
YE 31 Dec	2021A	2022A	2023A	2024	2023E	2020E
Net debt to equity (x)	0.7	0.6	0.6	0.6	0.5	0.4
Current ratio (x)	1.5	1.5	1.8	1.7	1.9	2.1
Receivable turnover days	63.8	65.4	69.6	70.0	70.0	70.0
Inventory turnover days	84.7	75.2	76.0	70.0	70.0	70.0
Payable turnover days	47.0	44.0	44.3	45.0	45.0	45.0
VALUATION YE 31 Dec	2021A	2022A	2023A	2024E	2025E	2026E
	20.3	24.0	23.6	23.6	21.9	19.6
P/E (adjusted) P/B	20.3 4.9	21.9 4.5	4.2	4.0	21.9 3.7	3.4
P/B P/CFPS	4.9 21.5	4.5 21.8	4.2 23.4	4.0 23.3	3.7 21.4	3.4 19.6
Div yield (%)	0.2	0.2	0.2	0.3	0.3	0.4
	0.2	0.2	0.2	0.5	0.5	0.4

Source: Company data, CMBIGM estimates. Note: The calculation of net cash includes financial assets.



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