Oxford Instruments plc

Half-year Report for the six months ended 30 September 2020

Our Purpose

Our core purpose is to support our customers in addressing some of the world's most pressing challenges, enabling a greener economy, increased connectivity, improved health, and leaps in scientific understanding.

We provide high technology products and services to the world's leading industrial companies and scientific research communities, exploiting our world-class ability to image, analyse and manipulate materials down to the atomic and molecular level.

Employee Pride
in working for us and making a difference

Respect
being inclusive and valuing our employees

Reputation
for positive contribution to society

Being Oxford Instruments

Accountability
for our actions

Health and Safety
ensuring everyone is safe

Trust
our people to deliver

FTSE 250 constituent

Contents

in this section

We discuss the progress we have made over the first half

> pages 1 to 25

in this section

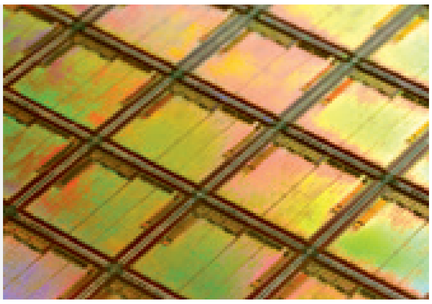
See how we have performed in the first half

> pages 26 to 48

Our business is structured around three sectors to support our customer and application focus:

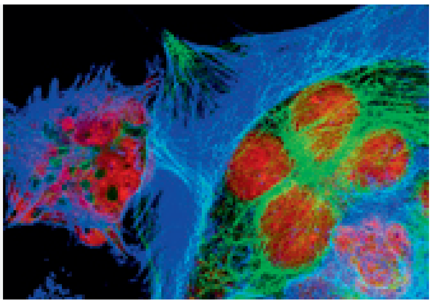
Materials & Characterisation

Products and solutions that enable the fabrication and characterisation of materials and devices down to the atomic scale, predominantly supporting customers across applied R&D as well as the production and manufacture of high technology products and devices.



Research & Discovery

Provides advanced solutions that create unique environments and enable imaging and analytical measurements down to the molecular and atomic level, predominantly used in scientific research and applied R&D.



Service & Healthcare

Provides customer service and support for our own products.

Performance Highlights

The Group has delivered a resilient first half performance considering the severity of the global disruption caused by the covid pandemic.

Revenue[1]

£140.3m (11.0%)

(HY 2019: £157.6m)

(11.0%) At constant currency

Adjusted[2] operating profit[1]

£24.3m (7.3%)

(HY 2019: £26.2m)

(11.5%) At constant currency

Adjusted[2] profit before tax[1]

£23.7m (8.1%)

(HY 2019: £25.8m)

Profit before tax[1]

£20.2m +6.9%

(HY 2019: £18.9m)

Adjusted[2] basic earnings per share[1]

32.8p (8.9%)

(HY 2019: 36.0p)

Dividend per share (half year)

4.1p

(HY 2019: —)

Cash generated from operations[1]

£23.3m +52.3%

(HY 2019: £15.3m)

Net cash

£81.4m

(HY 2019: £14.2m)

1. Continuing operations.
2. Throughout this report we make reference to adjusted numbers. A full definition of adjusted numbers can be found in Note 2 to the Condensed Consolidated Financial Statements. Where we make reference to constant currency numbers, these are prepared on a month-by-month basis using the translational and transactional exchange rates which prevailed in the previous year rather than the actual exchange rates which prevailed in the year. Transactional exchange rates include the effect of our hedging programme.

Financial highlights:

- Reported orders up 6.0% to £175.7m (2019: £165.7m), an increase of 5.9% at constant currency; book-to-bill ratio of 1.25
- Order book of £204.6m (31 March 2020: £175.0m), up 16.9% (16.6% at constant currency)
- Reported and constant currency revenue down by 11.0% to £140.3m, affected by customer site closures and the introduction of new covid-related working practices
- Adjusted operating profit from continuing operations down 7.3% at £24.3m (a decline of 11.5% at constant currency)
- Adjusted operating margin of 17.3% (2019: 16.6%), sustained at 16.6% constant currency despite the revenue decline
- Net cash grew to £81.4m, aided by good operating cash flow (97% cash conversion). At the end of September, the Group had total headroom of approximately £214m, including the undrawn £105m credit facility
- Robust half-year trading performance and strong order book supports an interim dividend of 4.1p

Operational highlights:

- Continued progress with our Horizon strategy; accelerating market intimacy and the transformation of our customer services
- Strong order growth driven by:
  - Continued demand from both academic and commercial customers
  - Buoyant demand in Semiconductor & Communications, Quantum Technology and Advanced Materials market segments
  - Good growth in North America and Asia offset by a modest decline in Europe
- Revenues held back by covid-related disruption in customer installation and acceptances; manufacturing sites remained operational and are adapting to new covid-safe working practices
- Strong margin performance driven by improved service profitability, tangible gains from Horizon strategy and cost controls
- Continued investment in our strategic product development programme; R&D spend maintained at £12.7m providing a healthy pipeline of future product launches
- Long-term growth drivers for end markets remain robust

Chief Executive's Review

The underlying long-term growth drivers for our chosen markets remain relevant and robust despite the coronavirus.

Ian Barkshire
Chief Executive

Introduction

As a global provider of high technology products and solutions to the world's leading industrial companies and scientific research communities, we recognise our responsibility and role in the advancement of society, helping to create a more sustainable future. Through our core purpose we are addressing some of the world's most pressing challenges, by enabling a greener economy, increased connectivity, improved health, and leaps in scientific understanding. The underlying long-term growth drivers for our chosen markets remain relevant and robust despite the coronavirus.

The Group has delivered a resilient first half performance considering the severity of the global disruption caused by the covid pandemic. This disruption has impacted our customers and end markets by varying amounts depending on regional and local responses to contain the virus, which have included reduced access to customer sites, protracted administrative processes and travel restrictions. Whilst we have kept all our sites open during this time, implementing covid-safe workplaces impacted our manufacturing capacity in the first half.

While these factors had a significant impact on first quarter performance, we have seen a steady improvement through the second quarter with continued positive momentum in orders and revenue through the period. The combination of prudent cost control measures, improved commercial practices, the transformation of our customer service approach and ongoing gains from our operational excellence programme supported a sustained operational margin for the Group despite reduced revenue.

We have continued to make good progress with the implementation of our Horizon strategy and have accelerated certain elements to align our operations more closely to their end markets. This has resulted in the transfer of our Magnetic Resonance business to the Materials & Characterisation sector, allowing us to better exploit sales, marketing and service synergies, providing increased reach and improved support for our target customers and applications.

Summary

Materials & Characterisation

The sector delivered strong growth in reported orders; covid-related disruptions negatively impacted shipments and installations in the period resulting in a reduction in revenue, adjusted operating profit and operating margin.

Research & Discovery

Revenues and orders for the sector were significantly impacted by disruptions caused by the coronavirus in the period. The disruption was most severe in the first quarter with continued improvement through the second quarter.

Service & Healthcare

In the first half the sector delivered order and revenue growth driven by increased demand for support services related to our own products. Revenue from our Japan MRI service operations were broadly in line with the previous year.

We remain focused on addressing a broad and diverse range of attractive end markets where our key enabling technologies enable customers to image, analyse and manipulate materials down to the atomic and molecular level, supporting their long-term growth. By addressing the academic, applied R&D and high-tech manufacturing segments, we are engaged throughout the technology cycle and are well positioned to benefit from each wave of commercialisation and technology disruption.

Results

Reported orders for the Group increased to £175.7m (2019: £165.7m) up 6.0% (5.9% at constant currency), reflecting strong growth from commercial customers and improved demand from academic and Government-funded institutions. Looking at our end markets, we saw strong growth across the Semiconductor & Communications, Quantum Technology and Advanced Materials segments, partially offset by lower contributions from the Healthcare & Lifescience, Energy & Environment and Research & Fundamental Science segments. This in turn led to strong growth in the Materials & Characterisation sector and a modest decline from our Research & Discovery sector. The initial phase in the transformation of our customer service approach supported good order growth for the Service & Healthcare sector. At a regional level, good order growth across North America and Asia was partially offset by a small decline in orders in Europe, where customer activity, local restrictions and reduced access have been most pronounced. Within Asia, orders for China grew by 18% supported by strong growth within Semiconductor and Advanced Materials end markets.

Revenue for the Group was impacted throughout the period by covid-related disruption to the fulfilment of customer orders. This resulted in a decline in reported and constant currency revenue to £140.3m (2019: £157.6m) a reduction of 11.0%, with a decline across the Materials & Characterisation and Research & Discovery sectors of 10.9% and 16.4% respectively. The Service & Healthcare sector delivered modest growth supported by increased demand for the services related to our own products. The combination of customer disruption and product mix in the period resulted in the proportion of revenue from academic customers increasing slightly to 54% (2019: 52%) in the first half. Operating margin was maintained at 16.6% on a constant currency basis supported by gains realised in the period from our Horizon strategy and cost controls.

From an end market perspective, we saw good constant currency revenue growth for the Semiconductor & Communications (30% of Group revenue) customer segment with strong growth for Quantum Technology (6% of revenue). In the Advanced Materials segment (27% of revenue), despite positive order and revenue growth to commercial customers, we saw a double-digit decline in revenue due to deferred shipments and temporary academic customer site closures. The Healthcare & Lifescience (20% of revenue) and Energy & Environment (8% of revenue) segments were strongly impacted by the logistics of accessing customer sites and the reduced academic customer activity in Europe and America during the period. Revenue for the Research & Fundamental Science market segment (9% of revenue) was in line with the comparable period last year.

From a geographical perspective, regional Government and customer responses to the pandemic dominated revenue profiles, with the strongest impacts being felt in North America and Europe, down 26% and 12% respectively. Asia delivered revenue broadly in line with previous first half as it recovered earlier from the first wave of the pandemic, allowing access to customer sites.

With good order growth and a deferral of revenue in the period, the order book, representing orders for future delivery, increased by 17% on a constant currency basis since March 2020, with significant growth in Materials & Characterisation and good growth across Research & Discovery and Service & Healthcare. The book-to-bill ratio for the period increased to 1.25.

Continued good cash collection, reflected in cash conversion of 97% in the period, resulted in an improved net cash position of £81.4m, up from £67.5m at year end.

Chief Executive's Review continued

Sector performance

Turning to the performance of the individual sectors:

Materials & Characterisation provides products and solutions that enable the fabrication and characterisation of materials down to the atomic scale, predominantly supporting customers across applied R&D as well as the production and manufacture of high technology products. Orders for the sector increased by 16.5% to £91.0m (2019: £78.1m), with growth from both academic and commercial customers, underpinned by strong growth to customers within the Semiconductor & Communications segment and improved demand within the Advanced Materials, Quantum and Healthcare & Lifescience segments. Order growth was strong in North America and Asia, supported by good growth in Europe. Reported and constant currency revenue of £65.2m (2019: £73.2m) declined by 10.9%, predominantly due to covid-related issues at our customers' sites. The impact was most pronounced among our higher-margin measurement and characterisation solutions where growth from Semiconductor & Communications and Quantum customers was offset by delayed shipments to other segments within Europe and North America. Reduced revenue, combined with a lower proportion of higher margin product, negatively impacted profitability within the period with reported adjusted operating profit declining by 27.0% to £8.9m (2019: £12.2m), representing a reduction of 32.0% at constant currency. Consequently, reported operational margin fell by 300 basis points (down 400 basis points at constant currency) to 13.7% (2019: 16.7%). The combination of strong orders and delayed shipments resulted in order book growth of 43.8% to £76.8m (March 2020: £53.4m).

Research & Discovery provides advanced solutions that create unique environments and enable the imaging and analytical measurements down to the atomic and molecular level, used predominantly within scientific research and applied R&D. Revenue and orders for the sector were significantly impacted in the first quarter by covid-related disruption to our academic customers in life sciences and semiconductor research. Whilst we have seen increased momentum through the second quarter, this initial impact led to reduced volumes of our scientific cameras and optical microscopy solutions in the period. This more than offset strong order and an in-line revenue performance across our product portfolio of cryogenic platforms, specialised high magnetic field systems and scientific X-ray tubes. This resulted in reported and constant currency revenue being down 16.4% to £48.3m (2019: £57.8m) in the period. Growth in Quantum Technology related revenue was more than offset by reductions across Healthcare & Lifescience and Semiconductor & Communications end markets with other segments remaining broadly in line with the previous year. Profitability for the sector was supported by realising tangible operational improvements through our Horizon strategy and careful cost management in the period. This resulted in an improvement in reported operational margin of 220 basis points to 13.3% (2019: 11.1%) up 120 basis points at constant currency, with reported adjusted operating profit flat at £6.4m (2019: £6.4m) representing a reduction of 7.5% at constant currency. The reported order book increased by 5.3% to £101.7m (March 2020: £96.5m).

Service & Healthcare provides customer service and support for our own products and the service of third-party MRI scanners in Japan. In the period we accelerated the transformation of our customer service approach to better support our customers as they manage through the covid pandemic. This has involved changing our service product offerings and the way in which we provide support to our customers around the world. Through the provision of increased digital products, remote services and better leveraging our global footprint we maintained high levels of support for our customers throughout the period. Revenue grew by 1.1% on a reported and constant currency basis to £26.8m (2019: £26.5m). Increased reported and constant currency operational profit margin for the sector of 490 basis points to 33.6% (2019: 28.7%) was supported by improved operational efficiencies and favourable product mix.

Reported and constant currency adjusted operating profit increased by 18.4% to £9.0m (2019: £7.6m). Order growth of 3.8% on a reported basis to £30.4m (2019: £29.3m) was driven by increased demand for services related to our own products and represents 3.1% growth at constant currency.

Covid response

The early actions we took in response to covid enabled us to maintain business continuity throughout the evolving phases of the pandemic. Our approach has enabled us to respond quickly to the associated ongoing global business disruption. These actions included establishing procedures and working practices to make our manufacturing sites and offices safe to work in, and ensuring those staff working off-site had full and secure access to the systems they required to undertake their roles.

Our priorities during this time have remained the health and wellbeing of our employees and the provision of support to our customers, helping them navigate their own operational challenges. Our hybrid workplace model, with its clear practices and procedures, guides each of our sites in line with the local situation and government guidelines. This has provided clarity and structure across our global business enabling us to maintain and optimise business continuity.

We have continued to develop and refine working practices across our sites and business functions to enable increased operational output and efficiencies. This has included the introduction of shifts in some of our facilities to deliver improved output whilst maintaining covid-safe workspaces.

The Group prudently took part in the UK Government's Job Retention Scheme given the highly uncertain market outlook at the start of the crisis. This involved a small number of employees being furloughed where they could not undertake their work remotely. However, by the end of June all furloughed colleagues had returned to work. In light of the resilience of the Group's performance in the period, we have now repaid all of the UK Government support.

Horizon progress

We have continued with the implementation of our Horizon strategy to strengthen our resilience through the ongoing market disruption as well as deliver sustainable future growth and margin improvement. In the period we continued the development of our capabilities and maintained our focus on improved market intimacy, operational excellence, enhanced delivery of R&D programmes and customer service transformation. This included continued investment in the development of our employees and undertaking selective recruitment to further enhance specific skills and capabilities to provide the foundation for future growth.

In response to covid-related market disruption and associated changes to our customer needs, we accelerated the delivery of our market intimacy programmes and the transformation of our service offering. From a market intimacy perspective, we expanded our digital marketing capabilities to offer additional webinars, online product launches, virtual conferences and higher value website content. Deeper market intimacy continues to provide valuable insights into our customers' strategic priorities, which allows us to identify additional opportunities for growth in existing and new adjacent markets. The strength of our market intimacy, alongside our enhanced digital presence and the success of recently launched products, has supported order growth in the period. From a service and support perspective, with travel restrictions and reduced customer site access, we accelerated the development and deployment of our digital and remote service capabilities and improved our "in region" service reach and capacity by cross-training our existing service teams. Our operational excellence programme continued to progress and contributed to margin enhancement in the period.

R&D

The development and delivery of highly innovative and market-leading products and key enabling technologies that deliver ongoing, sustainable value for our customers remains a central pillar within our Horizon strategy. Throughout the period, we have remained focused on our strategic R&D programme maintaining our progress and investment in this area, providing a healthy pipeline of future product launches. In the period we launched several new products in line with original expectations and further enriched our IP portfolio. R&D spend in the period of £12.7m (2019: £13.0m) is broadly in line with the previous year and represents 9.1% of sales.

People

I would like to thank all our employees for their commitment during these challenging times, the support they have given each other and their innovative approaches to ensuring our customers continue to receive a world-class experience from Oxford Instruments.

Our employees are fundamental to our ongoing business progress and I remain delighted by their continued engagement with our Horizon strategy. Their passion to both improve our business and support our customers has been demonstrated through their actions and agility throughout the unprecedented disruption caused by the coronavirus.

Dividend

Robust trading and positive cash generation through the period has resulted in the Board declaring an interim dividend of 4.1p per share, following last year's declared interim dividend of 4.1p, which, during the early stages of the pandemic, the Board decided not to pay.

Summary and outlook

The Group is positioned to be a leading provider of high technology products and services to the world's leading industrial customers and scientific research communities to image, analyse and manipulate materials down to the atomic and molecular level. This allows us to live up to our purpose of facilitating a greener economy, increased connectivity, improved health and leaps in scientific understanding.

We have seen strong order growth in the first half of the year with a good improvement in the order book. Orders have grown across our academic and commercial customer base, particularly for our compound semiconductor process solutions and quantum cryogenic and magnet systems. Covid-related customer-disruption has affected installation and commissioning activities. This, along with the introduction of new covid-safe working practices across our manufacturing sites, has led to a fall in revenue over the first half. Gains from our Horizon strategy and cost control enabled sustained operating margins despite lower revenue. The dedication, agility and resilience of our employees during this difficult period underpins our confidence in our ability to service and support the needs of our customers.

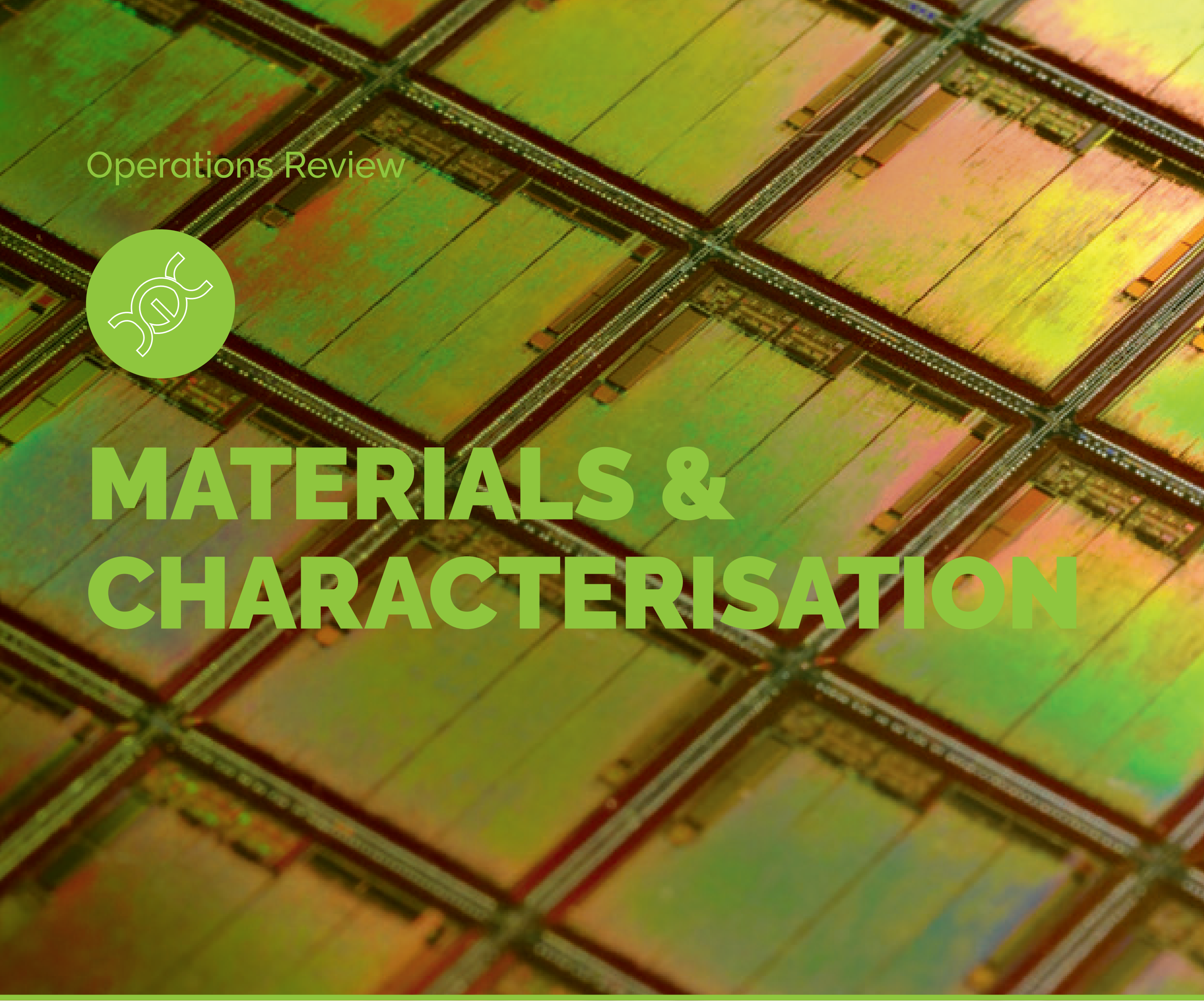
We are adjusting to the external and internal effects of the pandemic and expect uncertainty to remain high. However, robust trading during the first half, combined with a strong order book, gives us confidence for the second half, absent a material increase in covid-related disruption that could impact facility or customer site access. We expect full-year performance to be a little behind last year on a constant currency basis, ahead of current analyst forecasts.

The transformation of the Group through our Horizon strategy has provided a solid foundation for future growth. Our focus on markets with sustainable long-term growth drivers, our continuous drive for greater efficiencies and our ability to respond to evolving customer needs mean that we remain well positioned to navigate the current challenges and return to long-term sustainable growth and margin improvement.

Ian Barkshire
Chief Executive

10 November 2020

NOTE: Oxford Instruments plc compiled analyst forecast average consensus for adjusted operating profit (year to 31 March 2021) of £41.6m with an upper range of £45.0m.



MATERIALS & CHARACTERISATION

Revenue	
£65.2m	(10.9%)
(HY 2019: £73.2m)	(10.9%)[1] At constant currency

Adjusted[2] operating profit	
£8.9m	(27.0%)
(HY 2019: £12.2m)	(32.0%)[1] At constant currency

Adjusted[2] operating margin
13.7%
(HY 2019: 16.7%)

Operating profit after adjusting items
£7.8m
(HY 2019: £11.0m)

1. For definition, refer to note on page 2 of highlights.
2. Details of adjusting items can be found in Note 1 of the Condensed Consolidated Financial Statements.

From an end market perspective, we continued to see strong underlying demand and order growth from the Semiconductor & Communications and Advanced Materials segments.

The Materials & Characterisation sector comprises Asylum Research, NanoAnalysis, Magnetic Resonance and Plasma Technology. In the period we transferred the Magnetic Resonance business to this sector, better aligning the portfolio with end customer applications and enabling further exploitation of synergies across the sales, marketing, and service teams. The sector has a broad customer base across a wide range of applications for the imaging and analysis of materials down to the atomic level as well as the fabrication of semiconductor devices and structures through our range of advanced semiconductor etch and deposition process systems. Our portfolio of imaging and analysis systems includes our range of market-leading X-ray and electron analysis systems used in conjunction with electron and ion microscopes as well as our performance-leading atomic force microscopes and NMR analysers. The sector has a strong focus on supporting and accelerating our customers' applied R&D, enabling the development of new devices, next generation higher performance materials and enhancing productivity in advanced manufacturing, quality assurance (QA) and quality control (QC). We provide leading product performance, improved ease of use and enhanced productivity, with analytics and information to aid the interpretation of acquired data.

Materials & Characterisation delivered strong growth in reported orders; covid-related disruptions negatively impacted shipments and installations in the period, resulting in a reduction in revenue, adjusted operating profit and operating margin for the sector. Strong order performance was supported by continued positive underlying demand from our end markets, our enhanced market intimacy and the success of recently launched products.

Order growth was evenly split across commercial and academic customers with the strongest growth in Asia and good growth in North America, Europe was broadly in line with the previous first half. Revenue was significantly impacted by covid-related disruptions, affecting regions, markets, and customer types differently. This resulted in a reduction in revenue from commercial customers, while academic-related revenues were broadly in line with the previous year. Strongest declines were in Europe and North America where the severity and length of disruption has been largest; revenue in Asia was broadly in line with the previous year. Consequently, the proportion of revenue from commercial customers reduced to 52% (2019: 57%). The order book for future deliveries grew by 43.8% to £76.8m (2019: £53.4m).

From an end market perspective, we continued to see strong underlying demand and order growth from the Semiconductor & Communications and Advanced Materials segments, despite further weakening from automotive and aerospace customers. We also had good order growth from Quantum Technology and Healthcare & Lifescience segments. Orders in Energy & Environment were down due to subdued academic activity in the period. The combination of regional variations within our end markets and differing levels of covid disruption resulted in good revenue growth in Semiconductor & Communications and Quantum Technology, and a reduction across Advanced Materials, Energy & Environment and Healthcare & Lifescience, predominantly due to their higher proportion of customers within Europe and North America. Semiconductor & Communications represented 47% of sales in the sector, Advanced Materials 35% with Energy & Environment 11%, and Healthcare & Lifescience 3%.

Operations Review continued

Materials & Characterisation

The Semiconductor & Communications segment delivered double-digit order and revenue growth and remains a significant focus for the sector. We provide imaging and analysis products as well as etch and deposition process solutions used across a broad range of silicon and compound semiconductor device applications. We saw strong growth of our imaging and analysis solutions into mainstream silicon semiconductor and electronics applications in line with end market growth. Here our market-leading spatial resolution, ease of use and analytical integrity support the development of next generation technologies, the transfer to production of new designs and the quality control and assurance within production. AztecWave™, which we launched in the period, allows a step change in the ease of use and measurement of the low concentration materials and essential dopants required to achieve performance from semiconductor wafers, devices and bond wires.

The compound semiconductor market remains buoyant with resilient long-term sustainable growth drivers due to the ability of compound semiconductor devices to transform the energy efficiency of power electronics, dramatically increase connectivity and bandwidth, and enable faster communications. In the period, our strategic focus on improving the key process steps for the critical layers which determine end device performance supported order growth into power electronics applications such as example chargers, optoelectronic structures and lasers used in data communications, and sensors for autonomous vehicles.

Order growth of our measurement and semiconductor processing solutions has been further supported by our strategy to tailor product offerings for the specific needs of academic, corporate R&D and production customers.

Our expertise in semiconductor processing and characterisation is providing good growth within Quantum Technology markets where the uniformity, high purity and surface structure of the deposited materials are critical to the performance and lifetime of quantum devices. We have developed dedicated processing solutions for the specific materials being used within quantum R&D to directly address customer needs.

Our growth in the Advanced Materials segment is due to the continued drive to develop, control and repeatably manufacture stronger, lighter and higher performing materials across a broad range of end markets including automotive, textiles, displays, energy generation and construction. Our imaging and analysis products help our customers develop new higher performing materials and improve their manufacturing yields.

These advanced materials provide the pathway to transform end application performance, supporting the move towards reduced raw material usage and a lower end-to-end carbon footprint. As an example, the launch of our faster structural material analyser, Symmetry-S2™, in combination with our new application specific software, is being used by a major steel manufacturer to refine their processes in the development and process control of next generation advanced steels and super alloys required by automotive manufacturers to reduce vehicle weight whilst retaining structural integrity. The enhanced speed of our system and automated software, which uses a proprietary machine learning algorithm, reduces the characterisation process from many hours down to minutes.

The Semiconductor & Communications segment delivered double-digit order and revenue growth and remains a significant focus for the sector.

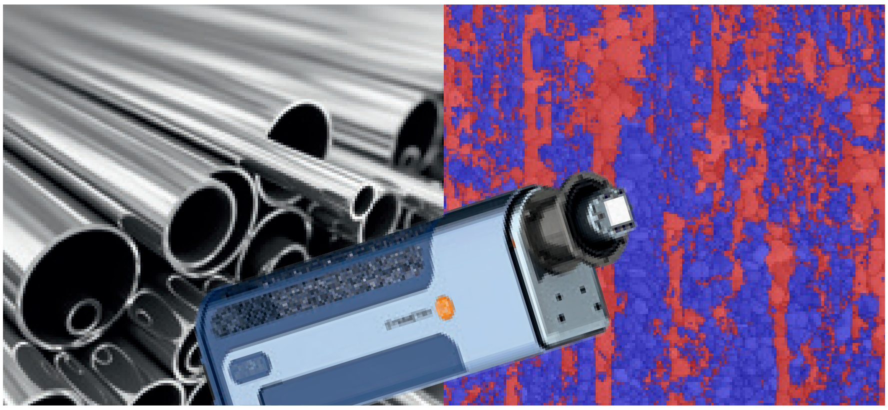
We have had continued strong demand and order growth in the analysis of advanced polymers, which are being developed for and utilised across a diverse range of applications including lower cost photovoltaics, enhanced performance displays and flexible bio implants. Our advanced atomic force microscopes enable the accurate characterisation of the mechanical and physical properties and the robustness of the polymers under changing environmental conditions. These properties determine their value and utility for each target application.

Whilst orders and revenue within the Environment & Energy segment declined in the period due to covid-related market disruption we continue to see sustainable long-term growth drivers and opportunities for growth across applications such as batteries and photovoltaics.

In the period we launched AZtecBattery™, a tailored software solution to provide quality control and assurance for the feedstocks used to manufacture the anodes and cathodes within batteries. Our analysis solutions are also being used to optimise the lifetime and performance of batteries through the characterisation of the composition and structure of the electrolytes that enable the transfer of charge during operation of the battery.

The Healthcare & Lifescience segment, which is a relatively small proportion of the sector, provides an opportunity for growth as we develop and tailor solutions for specific applications. In the period we received increased orders supported by the launch of AZtecPharma™, which has the required regulatory certification and traceable workflows for use across the pharmaceutical and biomedical industry.

It has been developed in collaboration with major manufacturers who are using it to identify foreign body contamination within and on the surface of medicine tablets. Our video rate atomic force microscopes are being used across a broad range of biomechanics and viral studies, including covid, due to its ability to observe the dynamic responses of biological material to environmental and pharmaceutical treatments in real time.



1. Composition and structure of Flip Chip Solder Bump with AZtecWave™
2. Next Generation Steel alongside Material Structure Analyser

RESEARCH & DISCOVERY

Revenue	
£48.3m	(16.4%)
(HY 2019: £57.8m)	(16.4%)[1] At constant currency

Adjusted[2] operating profit	
£6.4m	—
(HY 2019: £6.4m)	(7.5%)[1] At constant currency

Adjusted[2] operating margin
13.3%
(HY 2019: 11.1%)

Operating profit after adjusting items
£3.2m
(HY 2019: £3.2m)

1. For definition, refer to note on page 2 of highlights.
2. Details of adjusting items can be found in Note 2 of the Condensed Consolidated Financial Statements.

Profitability for the sector was enhanced by the realisation of tangible gains from the Horizon business improvements established in previous years.

The Research & Discovery sector includes Andor Technology, NanoScience and X-Ray Technology. This sector provides advanced solutions that create unique environments and enable imaging and analytical measurements down to the molecular and atomic level, used predominantly in fundamental and applied research. We build on our relationships with customers, working on breakthrough applications in research to gain insights and support future commercial applications. We have strong brand recognition and leading product performance in our chosen market segments.

Revenues and orders for the sector were significantly impacted by disruptions caused by coronavirus in the period. The disruption was most severe in the first quarter with continued improvement and positive momentum through the second quarter. The severity of the impact in the first quarter was largely due to the reduced activity at many of our target customer sites due to temporary closures, reduced occupancy or restricted access as well as reduced manufacturing capacity as we adapted our sites to covid-safe workplaces and established new working practices.

Customer disruption was most pronounced within Europe and North America and across our academic research customers in life science applications leading to reduced orders and revenues for our scientific cameras and optical microscopy solutions in the period. This more than offset strong order growth in Quantum Technology and Advanced Materials and an in-line revenue performance for our portfolio of cryogenic and high magnetic field systems and scientific X-ray tubes.

This resulted in reported revenue for the sector falling 16.4% to £48.3m. From an end market perspective, growth in Quantum Technology was more than offset by reductions in Healthcare & Lifescience and Semiconductor & Communications markets with Advanced Materials, Research & Fundamental Science and Energy & Environment segments being broadly in line with the previous first half year.

Profitability for the sector was enhanced by the realisation of tangible gains from the Horizon business improvements established in previous years and through careful cost management in the period.

This resulted in an increase in reported operational margins to 13.3% (2019: 11.1%) representing an improvement to 12.3% at constant currency. Reported adjusted operating profit remained at £6.4m representing a fall of 7.5% at constant currency.

Operations Review continued

Research & Discovery

Looking at the end market segments, within Healthcare & Lifescience, as previously mentioned, demand in Europe and North America was significantly subdued during the first quarter with temporary or partial site closures at academic research facilities and central research laboratories. The long-term fundamental market drivers of improving the health and wellbeing of society remain robust, driven by the need to better understand fundamental disease mechanisms at the cellular and molecular level, and for the development of new treatments, therapies and personalised medicines. As our customers' restrictions have eased, we have seen increased order levels with bookings in the second quarter being in line with the previous year. Our portfolio of advanced microscopy systems, analysis and visualisation software solutions and scientific cameras remain key enabling technologies to help our customers better understand the origins and progression of diseases such as cancer and neurological disorders like Alzheimer's, as well as the development of new medicines and treatments.

As an example, the CRISPR technique, which can be thought of as a pair of genetic scissors that can cut and edit specific sequences of DNA and was recognised with this year's Nobel prize, is an important part of the cell biologists' tool box with increased interest in its potential within cancer research. The method relies on extremely weak light signals and therefore requires highly sensitive scientific cameras such as our iXon™. Within the segment, we received increased demand from customers and our OEM partners involved in covid-related initiatives. This included use of our cameras within diagnostic testing equipment and researchers using our broad range of products to study the virus, understanding its genetic sequence, mutations, how it attacks patients' cells and organs and the response from their immune system.

Sales of our analysis and visualisation software were broadly in line with the previous year with customers able to utilise our products whilst working remotely from their facilities. Conversely, sales of our optical microscopy systems were significantly impacted in the first quarter with continued recovery through the second quarter and a building pipeline of future sales opportunities.

Quantum Technology continues to attract increased funding from governments and commercial customers because of the potential to transform computing, cryptography and sensor capabilities, in turn disrupting diverse end markets such as banking and healthcare. This has supported increased demand for our cryogenic platforms and high field magnet systems for both fundamental research into quantum effects, new quantum materials and in the development toward practical quantum computers.

Quantum Technology continues to attract increased funding from governments and commercial customers because of the potential to transform computing, cryptography and sensor capabilities.

Our recently launched Proteox™ cryogenic system is gaining market traction across leading academic and commercial customers and we are delighted to be a key partner with Rigetti, a US based quantum systems provider, in a UK government funded consortium to build the UK's first commercial quantum computer. Proteox™ will be at the heart of the system and we will be part of the team to build and operate the computer which will be housed at our Oxford facility.

Within the Advanced Materials segment our cryogenic platforms, high field magnet systems, scientific cameras and optical components are being used to explore and characterise the fundamental properties of next generation materials such as graphene-related two-dimensional sheets for use across a broad range of applications, including semiconductors, sensors and communication devices.

Within Research & Fundamental Science we continue to see long-term customer interest in our specialised cryogenic and superconducting magnet systems, and high-end scientific cameras across a broad range of research themes including astronomy and fundamental physics, chemistry and materials research. In the half we received further grants to develop more sensitive cameras for the tracking of space debris with continued long-term interest in astronomy applications.
The SOFIA space telescope, which NASA used to recently discover water on the moon, uses one of our cameras to guide the telescope and optically track the objects of interest. In the period, the first two systems for the Institute of Physics in Beijing were installed as part of the multisystem order into their extreme environments laboratory.

1. CRISPR DNA editing

2. Cryogenic system at heart of UK's first Commercial Quantum Computer in development

SERVICE & HEALTHCARE

Revenue	
£26.8m	+1.1%
(HY 2019: £26.6m)	+1.1%[1] At constant currency

Adjusted[2] operating profit	
£9.0m	+18.4%
(HY 2019: £7.6m)	+18.4%[1] At constant currency

Adjusted[2] operating margin

33.6%

(HY 2019: 28.6%)

Operating profit after adjusting items

£9.0m

(HY 2019: £7.6m)

1. For definition, refer to note on page 2 of highlights.
2. Details of adjusting items can be found in Note 2 of the Condensed Consolidated Financial Statements.

To meet the changing needs of our customers as a result of covid, we accelerated the transformation of our customer support services.

The Service & Healthcare sector comprises the Group's maintenance service contracts, billable repairs, training and support services, and spare part sales related to Oxford Instruments' own products; and the support and service of third-party MRI scanners in Japan.

In the first half the sector delivered order and revenue growth driven by increased demand for support services related to our own products. Revenue from our Japan MRI service operations were broadly in line with the previous year, with our team continuing to provide the same levels of support to hospitals throughout the disruption. Improved operational efficiencies and higher value products contributed to improved profitability in the half with adjusted operating profit increasing 18.4% to £9.0m with reported operating margin up 490 basis points to 33.6%.

To meet the changing needs of our customers as a result of covid, as previously mentioned, we accelerated the transformation of our customer support services including adapting our service offerings, introducing remote access products and changing the way in which we are organised and deliver our services.

With travel restrictions in place across many international borders we maximised our "in-region" capacity through cross-training of our existing engineers to cover a broader portfolio. Where customer site access was not possible, we were able to utilise our virtual reality "Live Assist" capabilities to enable remote product repair and commissioning. In the period we also made it easier for customers to reach our technical support teams through the launch of a live chat functionality on our website, allowing them to either quickly resolve their query or efficiently establish the next course of action. These new approaches were well received by customers, improving their productivity and minimising downtime, whilst increasing our own service capacity and efficiency. With customers' attitudes changing we have now released remote-only service contract options for some of our products.

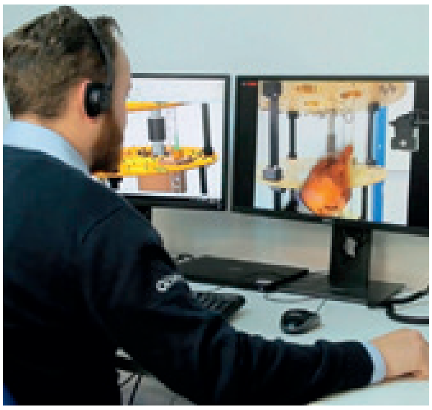
For those customers who had restricted access to their facilities during the pandemic we helped them connect to and remotely operate their equipment or securely access their data remotely for further analysis. We also assisted customers to safely shut down their systems remotely, and as they returned to their workplaces, to resume operations and bring their systems back online.

In addition, we increased the number and range of virtual training programmes that were available both for purchase and with free access.

Whilst we have accelerated the early phase of the transformation of our services offering, we have significant scope for further developments that will increase the value and breadth of support to our customers and contribute to the ongoing success of our Horizon strategy.

1. Remote Support

2. Augmented Reality Support



Finance Review

I am pleased to present the Finance Review for the half year to 30 September 2020.

Gavin Hill
Group Finance Director

In January 2020, the Group disposed of its minority equity stake in the Scienta Omicron joint venture to existing Shareholders. In the following month, the Group completed the disposal of its OI Healthcare business in the US. For the purposes of comparative reporting, OI Healthcare has been classified as a discontinued operation.

Reported orders increased by 6.0% to £175.7m (2019: £165.7m), an increase of 5.9% at constant currency. At the end of the period, the Group's order book for future deliveries stood at £204.6m (31 March 2020: £175.0m). The order book grew 16.9% on a reported basis and 16.6% at constant currency.

Reported and constant currency revenue on a continuing basis declined by 11.0% to £140.3m (2019: £157.6m).

Adjusted operating profit from continuing operations decreased by 7.3% to £24.3m (2019: £26.2m). Adjusted operating profit, excluding currency effects, decreased by 11.5% with a currency tailwind of £1.1m. Adjusted operating margin from continuing operations increased by 70 basis points to 17.3% (2019: 16.6%). Excluding currency effects, adjusted operating margin was flat at 16.6%.

Adjusted profit before tax from continuing operations declined by 8.1% to £23.7m (2019: £25.8m), representing a margin of 16.9% (2019: 16.4%).

Amortisation of acquired intangibles was £4.3m and the business incurred a credit of £0.8m relating to the movement in the mark-to-market valuation of uncrystallised currency hedges for future years. There were no other adjusting items in the period.

After adjusting items, the Group recorded an operating profit of £20.8m (2019: £19.3m), an increase of 7.8%, and profit before tax of £20.2m (2019: £18.9m), an increase of 6.9%.

Continuing adjusted basic earnings per share fell by 8.9% to 32.8p (2019: 36.0p). Continuing basic earnings per share were 27.7p (2019: 26.0p), growth of 6.5%.

Cash generated from operations of £23.3m (2019: £15.3m) represents 97% (2019: 62%) cash conversion. Net cash increased from £67.5m on 31 March 2020 to £81.4m, aided by good operating cash flow.

At the end of September, our revolving credit facility remained undrawn, leaving approximately £105m of committed facilities. This represents total headroom of about £214m. The Group has outstanding private placement loan notes of £27.9m, which mature on 31 March 2021, at which point headroom will fall to £186m.

Adjusted operating profit is stated before amortisation of acquired intangibles, restructuring costs, the mark-to-market valuation of unexpired currency hedges, and other adjusting items, as set out in Note 2 to the Financial Statements.

Revenue

£140.3m (11%)

(HY 2019: £157.6m)

Adjusted operating profit

£24.3m (7.3%)

(HY 2019: £26.2m)

Income Statement

The Group's Income Statement is summarised below.

	Half year to 30 September 2020 £m	Half year to 30 September 2019 £m	Change
Revenue	**140.3**	157.6	(11.0%)
Adjusted gross profit	**71.5**	79.5	(10.1%)
Administrative expenses	**(47.6)**	(52.2)	
Share of profit/(loss) of associate	**—**	—	
Foreign exchange	**0.4**	(1.1)	
Adjusted operating profit	**24.3**	26.2	(7.3%)
Net finance costs	**(0.6)**	(0.4)	
Adjusted profit before tax	**23.7**	25.8	(8.1%)
Amortisation of acquired intangibles	**(4.3)**	(4.4)	
Non-recurring items	**—**	—	
Mark-to-market of currency hedges	**0.8**	(2.5)	
Profit before tax	**20.2**	18.9	+6.9%
Tax from continuing operations	**(4.3)**	(4.0)	
Profit for the period from continuing operations	**15.9**	14.9	
Adjusted effective tax rate[1]	**20.7%**	20.2%	
Continuing adjusted earnings per share – basic	**32.8p**	36.0p	(8.9%)
Continuing earnings per share – basic	**27.7p**	26.0p	+6.5%
Continuing adjusted earnings per share – diluted	**32.4p**	35.6p	(9.0%)
Continuing earnings per share – diluted	**27.4p**	25.8p	+6.2%
Dividend per share	**4.1p**	—	

1. The adjusted effective tax rate is calculated excluding amortisation of acquired intangibles, the mark-to-market of financial derivatives, and other adjusting items.

Finance Review continued

Income Statement continued

Orders and revenue

Total reported orders grew by 6.0% (5.9% at constant currency) to £175.7m. Orders, at constant currency, grew by 16.5% for Materials & Characterisation, declined by 6.9% for Research & Discovery and grew by 3.1% for Service & Healthcare. The decline in Research & Discovery was principally due to a reduction in orders for our cameras and spectroscopy products in the academic sector.

Reported and constant currency revenue of £140.3m (2019: £157.6m) decreased by 11.0%. Reported revenue fell by 10.9% for Materials & Characterisation and 16.4% for Research & Discovery. Service & Healthcare reported revenue grew by 1.1%.

The book-to-bill ratio (orders received to goods and services billed in the period) for the year was 1.25.

Revenue, at constant currency, declined by 10.9% for Materials & Characterisation partly due to customer disruption from covid that hampered our ability to ship product to customer sites, and the impact on production capacity from the implementation of new safe working practices. A constant currency decline of 16.4% in Research & Discovery was impacted by production constraints as our manufacturing sites adapted to new covid working practices, as well as being unable to complete high value product installations in Asia ahead of the period end owing to customer site closures and travel constraints on service personnel.

Service & Healthcare constant currency revenue grew by 1.1%, with good growth from the service of our own products.

Revenue from Asia of £63.9m (a constant currency decline of 0.8%) constitutes 46% of total Group revenue, with China being 54% and 25% of the regional and Group totals respectively. Revenue from Europe of £40.5m (a constant currency decline of 12.0%) is 29% of total Group revenue. North America's constant currency revenue declined by 26% to £33.8m, proportionate to 24% of total Group revenue. The Rest of World revenue for the period was £2.0m, constant currency growth of 40%.

The total reported order book grew by 16.9% (16.6% at constant currency) to £204.6m (2019: £175.0m). The order book, at constant currency, compared to 31 March 2020, increased by 44.9% for Materials & Characterisation, 5.5% for Research & Discovery and fell by 1.3% for Service & Healthcare. This good growth has been supported by revenue not recognised in the year owing to delayed shipments and installations.

£m	Materials & Characterisation	Research & Discovery	Service & Healthcare	Total
Revenue[1]: Half year to 30 September 2019	73.2	57.8	26.6	157.6
Underlying movement	(8.0)	(9.5)	0.2	(17.3)
Foreign exchange	—	—	—	—
Revenue[1]: Half year to 30 September 2020	**65.2**	**48.3**	**26.8**	**140.3**
Revenue growth: reported	(10.9%)	(16.4%)	+1.1%	(11.0%)
Revenue growth: constant currency	(10.9%)	(16.4%)	+1.1%	(11.0%)

1. From continuing operations.

Adjusted gross profit

Adjusted gross profit fell by 10.1% to £71.5m (2019: £79.5m), representing a gross profit margin of 51.0%, a decline of 40 basis points over last year.

Adjusted operating profit

Adjusted operating profit from continuing operations decreased by 7.3% to £24.3m (2019: £26.2m), representing an adjusted operating profit margin of 17.3%, an increase of 70 basis points against last year. At constant currency, the adjusted operating profit margin was 16.6%, in line with last year.

Materials & Characterisation margin declined by 300 basis points to 13.7% (2019: 16.7%) with the margin in NanoAnalysis falling on lower revenue. Margins in Plasma Technology have remained broadly constant and we have seen good growth in Asylum Research's margins. Following an internal reorganisation, the Magnetic Resonance product range and the costs of a small research facility in Finland are now recorded within Materials & Characterisation. Both were previously recorded within Research & Discovery. At constant currency the margin was 12.7%.

Research & Discovery's adjusted operating margin increased to 13.3% (2019: 11.1%), growth of 220 basis points. At constant currency, the margin was 12.3%. Margin growth was supported by the installation of some significant complex magnet and cryogenic systems for NanoScience. Good cost control and favourable product mix within Andor Technology prevented margin dilution from a fall in revenue.

Service & Healthcare margin increased by 490 basis points to 33.6% (2019: 28.7%) owing to our focus on improving service revenue on our own products, combined with some large upgrades in Andor Technology. At constant currency, the margin was 33.6%.

Currency effects (including the impact of transactional currency hedging) have increased reported adjusted operating profit by £1.1m when compared to blended hedged exchange rates for the comparative period.

£m	Materials & Characterisation	Research & Discovery	Service & Healthcare	Total
Adjusted operating profit[1]: Half year to 30 September 2019	12.2	6.4	7.6	26.2
Underlying movement	(3.9)	(0.5)	1.4	(3.0)
Foreign exchange	0.6	0.5	—	1.1
Adjusted operating profit[1]: Half year to 30 September 2020	**8.9**	**6.4**	**9.0**	**24.3**
Margin: Half year to 30 September 2019	16.7%	11.1%	28.6%	16.6%
Margin: Half year to 30 September 2020	**13.7%**	**13.3%**	**33.6%**	**17.3%**

1. From continuing operations.

Adjusting items

Amortisation of acquired intangibles of £4.3m relates to intangible assets recognised on acquisitions, being the value of technology, customer relationships and brands.

The Group uses derivative products to hedge its short-term exposure to fluctuations in foreign exchange rates. It is Group policy to have in place at the beginning of the financial year hedging instruments to cover 80% of its forecast transactional exposure for that year. The Group has decided that the additional costs of meeting the extensive documentation requirements of IFRS 9 to apply hedge accounting to these foreign exchange hedges cannot be justified. Accordingly, the Group does not use hedge accounting for these derivatives.

Net movements on mark-to-market derivatives in respect of transactional currency exposures of the Group in future periods are disclosed in the Income Statement as foreign exchange and excluded from our calculation of adjusted profit before tax. In the current year this amounted to a credit of £0.8m (2019: £2.5m charge). The period-end asset primarily reflects an uncrystallised gain arising from a rise in the value of Sterling at the balance sheet date against a blended rate achieved on US Dollar, Euro and Japanese Yen forward contracts that will mature over the next twelve months.

There were no other adjusting items booked in the period.

Net finance costs

The Group's adjusted net finance costs were £0.6m (2019: £0.4m), the small increase due to a refund of overpaid interest last year.

Profit before tax

Continuing adjusted profit before tax fell by 8.1% to £23.7m (2019: £25.8m). The adjusted profit before tax margin of 16.9% (2019: 16.4%) was above last year due good cost control offsetting lower revenue, as well as a small currency tailwind.

Continuing profit before tax of £20.2m (2019: £18.9m) is after the mark-to-market movement on derivative financial instruments, and amortisation of acquired intangibles.

Tax

The adjusted tax charge from continuing operations of £4.3m (2019: £4.0m) represents an effective tax rate of 20.7% (2019: 20.2%), the increase reflecting a change in the geographical mix of profits earned.

Earnings per share

Continuing adjusted basic earnings per share decreased by 8.9% to 32.8p (2019: 36.0p); continuing adjusted diluted earnings per share fell by 9.0% to 32.4p (2019: 35.6p). Continuing basic earnings per share increased by 6.5% to 27.7p (2019: 26.0p) and continuing diluted earnings per share grew by 6.2% to 27.4p (2019: 25.8p).

The number of undiluted weighted average shares increased marginally to 57.3m.

Foreign exchange

The Group faces transactional and translational currency exposure, most notably against the US Dollar, Euro and Japanese Yen. Translational exposures arise on the consolidation of overseas company results into Sterling. Transactional exposures arise where the currency of sale or purchase transactions differs from the functional currency in which each company prepares its local accounts. With many of the manufacturing sites residing in the UK, the Group has a significant cost base in Sterling.

Finance Review continued

Foreign currency exposure

The Group's foreign currency exposure for the half year is summarised below.

£m (equivalent)	Revenue	Adjusted operating profit
Sterling	26.0	(30.8)
US Dollar	66.9	28.1
Euro	30.3	18.4
Japanese Yen	14.3	8.6
Chinese Renminbi	2.4	0.6
Other	0.4	(0.6)
	140.3	**24.3**

The Group maintains a hedging programme against its net transactional exposure using internal projections of currency trading transactions expected to arise over a period extending from 12 to 24 months. As at 30 September 2020, the Group had currency hedges in place extending up to 18 months forward.

For the second half of this financial year, our assessment of the currency impact is, based on hedges currently in place and forecast rates, a reduction in revenue of £1.0m and an increase in adjusted operating profit of £0.2m. As an example sensitivity for the second half of the year, if we assume a 5% appreciation of Sterling against our major trading currencies from forecast rates, then, with the benefit of hedging in place, the estimated impact is a reduction in revenue and adjusted operating profit of £7.9m and £1.3m respectively. Uncertain volume and timing of shipments and acceptances, currency mix and FX volatility may significantly affect second half currency effects. Forecast rates for the second half are - GBP:USD 1.30; GBP:EUR 1.11; GBP:JPY 135.

Disposal of OI Healthcare – discontinued operations

On 24 February 2020, the Group sold the OI Healthcare business in the US to MXR Imaging, Inc, for a consideration of $14.9m (£11.5m). The business has been treated as a discontinued operation within the comparatives.

Disposal of Scienta Omicron

On 29 January 2020, the Group sold its 47% share in Scienta Omicron to a group of existing Shareholders in the joint venture for a consideration of SEK 147m (£11.7m). For the comparative period, the Group did not record a profit from the joint venture.

Dividend

The Group's policy is to increase the dividend each year in line with the increase in underlying earnings, considering movements in currency. Following the high uncertainty created by the impact of covid, the Board decided not to pay the 2019/20 interim dividend of 4.1p per share and then did not declare a final dividend. A better than expected trading performance, growth in the order book and good cash generation has resulted in the Board proposing an interim dividend of 4.1p for the 2020/21 financial year. The interim dividend will be paid on 14 April 2021 to shareholders on the register as at 5 March 2021. Monies received under the UK government's furlough scheme were fully repaid in the period.

Cash flow

The Group cash flow is summarised below.

	Half year to 30 September 2020 £m	Half year to 30 September 2019 £m
Adjusted operating profit	**24.3**	26.2
Depreciation and amortisation	**4.1**	4.5
Adjusted EBITDA	**28.4**	30.7
Working capital movement	**(3.0)**	(11.3)
Equity settled share schemes	**1.1**	2.0
Share of profit/(loss) from associate	**—**	—
Business reorganisation items	**0.5**	—
Pension scheme payments above charge to operating profit	**(3.7)**	(6.1)
Cash generated from operations	**23.3**	15.3
Interest	**(1.0)**	(1.1)
Tax	**(4.0)**	(3.5)
Capitalised development expenditure	**(0.5)**	(2.2)
Expenditure on tangible and intangible assets	**(1.1)**	(1.5)
Decrease in long-term receivables	**—**	0.5
Dividends paid	**—**	(2.2)
Proceeds from issue of share capital and exercise of share options	**0.1**	0.2
Payments made in respect of lease liabilities	**(1.3)**	(1.4)
Decrease in borrowings	**—**	—
Net increase in cash and cash equivalents from continuing operations	**15.5**	4.1

Note: Adjusted EBITDA is earnings before interest, tax, depreciation, amortisation of acquired intangibles and the mark-to-market of financial derivatives.

Cash generated from operations

Cash generated from operations of £23.3m (2019: £15.3m) represents 97% (2019: 62%) cash conversion. Cash conversion is defined as cash generated from operations before non-recurring items and pension scheme payments, less capitalised development expenditure, capital expenditure and payments made in respect of finance leases/adjusted operating profit.

Working capital rose by £3.0m. Inventories rose by £0.6m with additional finished goods due to shipments held over the year end following closure of customer sites. Receivables declined by £2.1m and payables and customer deposits decreased by £4.5m, partly due to a clearing of payable balances prior to implementation of a new ERP in Asylum Research just after the half year end.

The reduction in the cost of equity settled share schemes is due to a catch-up charge relating to a correction in the valuation of management share option incentive schemes made in the comparative period.

Pension

Pension costs relate to recovery payments made to the UK defined benefit pension scheme. Under the current actuarial plan, payments are scheduled to continue until 2026.

Cash flow continued

Interest

Net interest paid was £1.0m (2019: £1.1m), broadly in line with last year.

Tax

Tax paid was £4.0m (2019: £3.5m).

Investment in Research and Development (R&D)

Total cash spend on R&D in the half year was £12.7m, equivalent to 9.1% of sales (2019: £13.0m, 8.2% of sales). A reconciliation between the adjusted amounts charged to the Income Statement and the cash spent is given below:

	Half year to 30 September 2020 £m	Half year to 30 September 2019 £m
R&D expense charged to the Income Statement	**13.2**	11.9
Amounts capitalised as fixed assets	**—**	0.1
Amortisation of R&D costs previously capitalised as intangibles	**(1.0)**	(1.2)
Amounts capitalised as intangible assets	**0.5**	2.2
Total cash spent on R&D during the year	**12.7**	13.0

Net debt and funding

Net debt

Good cash generation in the half year increased the Group's net cash position from £67.5m to £81.4m. Cash generated from operations was £23.3m (2019: £15.3m). The Group invested in capitalised development costs of £0.5m and tangible and intangible assets of £1.1m.

Movement in net debt	£m
Net cash as at 31 March 2020	67.5
Cash generated from operations	23.3
Interest	(1.0)
Tax	(4.0)
Capitalised development expenditure	(0.5)
Capital expenditure on tangible and intangible assets	(1.1)
Dividends paid	—
Other items	(2.8)
Net cash as at 30 September 2020	**81.4**

Funding

On 2 July 2018, the Group entered into a new unsecured multi-currency revolving facility agreement, which is committed until June 2023 with one-year extension options at the end of the first and second years. The facility has been entered into with two banks and comprises a Euro-denominated multi-currency facility of €50.0m and a US Dollar-denominated multi-currency facility of $80.0m.

We have agreed with our banks to extend the facility by one year to June 2024, with an option to request an extension for a further year in one year's time.

The Group has outstanding bilateral private placement notes of £27.9m, which mature on 31 March 2021.

Debt covenants are net debt to EBITDA less than 3.0 times and EBITDA to interest greater than 4.0 times. As at 30 September 2020 the business had net cash.

Pensions

The Group has a defined benefit pension scheme in the UK. This has been closed to new entrants since 2001 and closed to future accrual from 2010.

At 30 September 2020, the net surplus arising from our defined benefit pension scheme obligations was £1.1m (31 March 2020: £30.7m). A significant fall in corporate bond yields has resulted in a lower discount rate and, combined with changes to the assumed level of inflation, has resulted in a higher value being placed on the scheme's liabilities. The increase in liabilities has been partially mitigated by contributions paid and the return on the scheme's assets being higher than the discount rate over the period. Total scheme assets at 30 September 2020 were £352.9m (31 March 2020: £321.4m) while liabilities were £351.8m (31 March 2020: £290.7m).

We terminated the US defined benefit pension scheme at the end of the last fiscal year. All payments made last year were in full and final settlement of the scheme's liabilities.

Going concern

The Group's business activities, together with the factors likely to affect its future development, performance and position, are set out in the Performance Highlights, Chief Executive's Review and Operations Review sections of this Half-year Report. The financial position of the Group, its cash flows, liquidity position and borrowing facilities are described in the Finance Review.

Considering the global health crisis resulting from the outbreak of covid and the impact that has already materialised in terms of disruption to operations and customer activity, it is reasonable to expect that the future performance of the Group will be adversely affected. Due to the continuing global uncertainty, there is greater volatility and uncertainty in trading outcomes for the year ahead. The Board has prepared and reviewed several scenarios for the Group's future performance based on varying degrees of disruption caused by covid on orders, trading and cash flow performance. In addition, the Group has overlaid the risk of long-term adverse movements in foreign exchange rates to our cash flow forecasts as an additional sensitivity to those forecasts. The outcome of this assessment shows that the Group can operate within its current facilities, without the need to obtain any new facilities, for a period of not less than twelve months from the date of this report. The Board is satisfied, having considered the current cash position, the sensitivity analysis, as well as its committed funding facilities, that the Group has adequate resources to continue in operational existence for the foreseeable future. Consequently, the Condensed Consolidated Financial Statements continue to be prepared on a going concern basis.

Forward-looking statements

This document contains certain forward-looking statements. The forward-looking statements reflect the knowledge and information available to the Company during the preparation and up to the publication of this document. By their very nature, these statements depend upon circumstances and relate to events that may occur in the future, thereby involving a degree of uncertainty. Therefore, nothing in this document should be construed as a profit forecast by the Company.

Gavin Hill

Group Finance Director

10 November 2020

Principal Risks and Uncertainties

Information regarding the risk management process in place at the Group is set out on page 50 of the 2020 Annual Report. The principal risks and uncertainties identified through that process are set out on pages 50 to 54 of the 2020 Annual Report and can be found on the Group's website at **www.oxinst.com**.

In keeping with the risk management process, the Group has performed a quarterly update of its risk register as at 30 September 2020. It has evaluated the disclosures made on pages 50 to 54 of the 2020 Annual Report and has concluded that the risks identified remain relevant for the remainder of the year ending 31 March 2021 and that there are no other significant risks to be disclosed.

A summary of the risks identified is set out below:

- impact of covid;
- routes to market;
- technical risk;
- supply chain risk;
- political risk;
- Brexit-related risks;
- IT risk;
- legal/compliance risk;
- adverse movements in long-term foreign currency rates;
- people;
- operational risk; and
- pensions.

The ongoing negotiations relating to the United Kingdom's future trading relationship with the European Union at the end of the transition phase mean that uncertainty over the potential impact of Brexit remains. The Group has assessed the key risks arising from Brexit and concluded that the most significant short-term risks arise from potential disruption to the movement of goods both into and out of Great Britain and Northern Ireland.

The future impact of covid continues to create uncertainty and the potential for heightened disruption at an operational and customer level remains. The possible impacts arising from both Brexit and covid create significant uncertainty at a macro-economic level. Operationally, this uncertainty could cause supply chain disruption leading to an adverse impact on production and, ultimately, deliveries to customers.

Responsibility Statement of the Directors

in respect of the Half-year Financial Statements

We confirm that to the best of our knowledge:

- the condensed set of Financial Statements has been prepared in accordance with IAS 34 Interim Financial Reporting as adopted by the EU; and
- the interim management report includes a fair review of the information required by:

  (a) DTR 4.2.7R of the Disclosure Guidance and Transparency Rules, being an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed set of Financial Statements; and a description of the principal risks and uncertainties for the remaining six months of the year; and

  (b) DTR 4.2.8R of the Disclosure Guidance and Transparency Rules, being related party transactions that have taken place in the first six months of the current financial year and that have materially affected the financial position or performance of the entity during that period; and any changes in the related party transactions described in the last Annual Report that could do so.

Ian Barkshire
Chief Executive

Gavin Hill
Group Finance Director

10 November 2020

Condensed Consolidated Statement of Income

Half year ended 30 September 2020 – unaudited

	Note	Half year to 30 September 2020			Half year to 30 September 2019 as restated[2]		
		Adjusted £m	Adjusting items[1] £m	Total £m	Adjusted £m	Adjusting items[1] £m	Total £m
Revenue	4	**140.3**	**—**	**140.3**	157.6	—	157.6
Cost of sales		**(68.8)**	**—**	**(68.8)**	(78.1)	—	(78.1)
Gross profit		**71.5**	**—**	**71.5**	79.5	—	79.5
Research and development	5	**(13.2)**	**—**	**(13.2)**	(11.9)	—	(11.9)
Selling and marketing		**(19.8)**	**—**	**(19.8)**	(23.4)	—	(23.4)
Administration and shared services		**(14.6)**	**(4.3)**	**(18.9)**	(16.9)	(4.4)	(21.3)
Foreign exchange gain/(loss)		**0.4**	**0.8**	**1.2**	(1.1)	(2.5)	(3.6)
Operating profit/(loss)		**24.3**	**(3.5)**	**20.8**	26.2	(6.9)	19.3
Interest credit on pension scheme net assets		**0.4**	**—**	**0.4**	—	—	—
Other financial income		**0.1**	**—**	**0.1**	0.5	—	0.5
Financial income		**0.5**	**—**	**0.5**	0.5	—	0.5
Financial expenditure		**(1.1)**	**—**	**(1.1)**	(0.9)	—	(0.9)
Profit/(loss) before income tax	4	**23.7**	**(3.5)**	**20.2**	25.8	(6.9)	18.9
Income tax (expense)/credit		**(4.9)**	**0.6**	**(4.3)**	(5.2)	1.2	(4.0)
Profit/(loss) for the half year from continuing operations		**18.8**	**(2.9)**	**15.9**	20.6	(5.7)	14.9
Loss from discontinued operations after tax	7	**—**	**—**	**—**	(0.3)	(0.4)	(0.7)
Profit/(loss) for the half year attributable to equity holders of the parent		**18.8**	**(2.9)**	**15.9**	20.3	(6.1)	14.2

Earnings per share		pence		pence	pence		pence
Basic earnings per share	3						
From continuing operations		**32.8**		**27.7**	36.0		26.0
From discontinued operations		**—**		**—**	(0.5)		(1.2)
From profit for the half year		**32.8**		**27.7**	35.5		24.8
Diluted earnings per share	3						
From continuing operations		**32.4**		**27.4**	35.6		25.8
From discontinued operations		**—**		**—**	(0.5)		(1.2)
From profit for the half year		**32.4**		**27.4**	35.1		24.6
Dividends per share	9						
Dividends paid				**—**			3.8
Dividends proposed[3]				**4.1**			4.1

1. Adjusted numbers are stated to give a better understanding of the underlying business performance. Details of adjusting items can be found in Note 2.
2. Details of restatement of prior period numbers can be found in the basis of preparation. The restatement had no impact on total profit for the prior period.
3. Payment of the prior period interim dividend which was proposed by the Board on 12 November 2019 has been suspended until further notice.

	Note	Year to 31 March 2020 Adjusted £m	Adjusting items[1] £m	Total £m
Revenue	4	317.4	—	317.4
Cost of sales		(158.6)	(0.4)	(159.0)
Gross profit/(loss)		158.8	(0.4)	158.4
Research and development	5	(26.6)	(7.1)	(33.7)
Selling and marketing		(47.7)	—	(47.7)
Administration and shared services		(34.7)	(8.3)	(43.0)
Share of profit of associate, net of tax		0.7	6.5	7.2
Foreign exchange loss		—	(1.4)	(1.4)
Operating profit/(loss)		50.5	(10.7)	39.8
Interest credit on pension scheme net assets		—	—	—
Other financial income		0.3	—	0.3
Financial income		0.3	—	0.3
Financial expenditure		(1.3)	—	(1.3)
Profit/(loss) before income tax	4	49.5	(10.7)	38.8
Income tax (expense)/credit		(9.3)	2.5	(6.8)
Profit/(loss) for the year from continuing operations		40.2	(8.2)	32.0
(Loss)/profit from discontinued operations after tax	7	(0.5)	2.3	1.8
Profit/(loss) for the year attributable to equity holders of the parent		39.7	(5.9)	33.8

Earnings per share		pence		pence
Basic earnings per share	3			
From continuing operations		70.2		55.9
From discontinued operations		(0.9)		3.1
From profit for the year		69.3		59.0
Diluted earnings per share	3			
From continuing operations		69.5		55.3
From discontinued operations		(0.9)		3.1
From profit for the year		68.6		58.4
Dividends per share	9			
Dividends paid				14.4
Dividends proposed				—

1. Adjusted numbers are stated to give a better understanding of the underlying business performance. Details of adjusting items can be found in Note 2.

Condensed Consolidated Statement of Comprehensive Income

Half year ended 30 September 2020 – unaudited

	Half year to 30 September 2020 £m	Half year to 30 September 2019 £m	Year to 31 March 2020 £m
Profit for the half year/year	**15.9**	14.2	33.8
Other comprehensive (expense)/income:			
Items that may be reclassified subsequently to profit or loss			
Foreign exchange translation differences	**(2.0)**	2.7	2.5
Net cumulative foreign exchange gain on disposal of subsidiaries recycled to the Income Statement	**—**	—	(4.4)
Items that will not be reclassified to profit or loss			
Remeasurement (loss)/gain in respect of post-retirement benefits (Note 11)	**(33.7)**	3.3	26.8
Tax credit/(charge) on items that will not be reclassified to profit or loss	**6.4**	(0.6)	(5.1)
Total other comprehensive (expense)/income	**(29.3)**	5.4	19.8
Total comprehensive (expense)/income for the half year attributable to equity Shareholders of the parent	**(13.4)**	19.6	53.6

Condensed Consolidated Statement of Changes in Equity

Half year ended 30 September 2020 – unaudited

	Share capital £m	Share premium £m	Other reserves £m	Translation reserve £m	Retained earnings £m	Total £m
As at 1 April 2020	2.9	62.2	0.2	11.5	174.8	251.6
Total comprehensive income:						
Profit for the half year	**—**	**—**	**—**	**—**	**15.9**	**15.9**
Other comprehensive (expense)/income:						
– Foreign exchange translation differences	**—**	**—**	**—**	**(2.0)**	**—**	**(2.0)**
– Remeasurement loss in respect of post-retirement benefits	**—**	**—**	**—**	**—**	**(33.7)**	**(33.7)**
– Tax credit on items that will not be reclassified to profit or loss	**—**	**—**	**—**	**—**	**6.4**	**6.4**
Total comprehensive expense attributable to equity Shareholders of the parent	**—**	**—**	**—**	**(2.0)**	**(11.4)**	**(13.4)**
Transactions with owners recorded directly in equity:						
– Proceeds from exercise of share options	**—**	**—**	**—**	**—**	**—**	**—**
– Credit in respect of employee service costs settled by award of share options	**—**	**—**	**—**	**—**	**1.1**	**1.1**
– Tax credit in respect of share options	**—**	**—**	**—**	**—**	**—**	**—**
– Proceeds from shares issued	**—**	**0.2**	**—**	**—**	**—**	**0.2**
– Dividends	**—**	**—**	**—**	**—**	**—**	**—**
Total transactions with owners recorded directly in equity:	**—**	**0.2**	**—**	**—**	**1.1**	**1.3**
As at 30 September 2020	**2.9**	**62.4**	**0.2**	**9.5**	**164.5**	**239.5**
As at 1 April 2019	2.9	61.7	0.2	13.4	124.0	202.2
Total comprehensive income:						
Profit for the half year	—	—	—	—	14.2	14.2
Other comprehensive income/(expense):						
– Foreign exchange translation differences	—	—	—	2.7	—	2.7
– Remeasurement gain in respect of post-retirement benefits	—	—	—	—	3.3	3.3
– Tax charge on items that will not be reclassified to profit or loss	—	—	—	—	(0.6)	(0.6)
Total comprehensive income attributable to equity Shareholders of the parent	—	—	—	2.7	16.9	19.6
Transactions with owners recorded directly in equity:						
– Proceeds from exercise of share options	—	—	—	—	0.2	0.2
– Credit in respect of employee service costs settled by award of share options	—	—	—	—	2.0	2.0
– Tax credit in respect of share options	—	—	—	—	—	—
– Proceeds from shares issued	—	—	—	—	—	—
– Dividends	—	—	—	—	(8.3)	(8.3)
Total transactions with owners recorded directly in equity:	—	—	—	—	(6.1)	(6.1)
As at 30 September 2019	2.9	61.7	0.2	16.1	134.8	215.7

Condensed Consolidated Statement of Changes in Equity continued

Half year ended 30 September 2020 – unaudited

	Share capital £m	Share premium £m	Other reserves £m	Translation reserve £m	Retained earnings £m	Total £m
As at 1 April 2019	2.9	61.7	0.2	13.4	124.0	202.2
Total comprehensive income:						
Profit for the year	—	—	—	—	33.8	33.8
Other comprehensive income/(expense):						
– Foreign exchange translation differences	—	—	—	2.5	—	2.5
– Net cumulative foreign exchange gain on disposal of subsidiaries recycled to the Income Statement	—	—	—	(4.4)	—	(4.4)
– Remeasurement gain in respect of post-retirement benefits	—	—	—	—	26.8	26.8
– Tax charge on items that will not be reclassified to profit or loss	—	—	—	—	(5.1)	(5.1)
Total comprehensive (expense)/income attributable to equity Shareholders of the parent	—	—	—	(1.9)	55.5	53.6
Transactions with owners recorded directly in equity:						
– Proceeds from exercise of share options	—	—	—	—	0.2	0.2
– Credit in respect of employee service costs settled by award of share options	—	—	—	—	3.1	3.1
– Tax credit in respect of share options	—	—	—	—	0.2	0.2
– Proceeds from shares issued	—	0.5	—	—	—	0.5
– Dividends	—	—	—	—	(8.2)	(8.2)
Total transactions with owners recorded directly in equity:	—	0.5	—	—	(4.7)	(4.2)
As at 31 March 2020	2.9	62.2	0.2	11.5	174.8	251.6

Condensed Consolidated Statement of Financial Position

As at 30 September 2020 – unaudited

	Note	**As at 30 September 2020 £m**	As at 30 September 2019 £m	As at 31 March 2020 £m
Assets				
Non-current assets				
Property, plant and equipment		**20.5**	24.5	21.8
Right-of-use assets		**7.0**	8.8	8.2
Intangible assets		**130.3**	149.8	135.5
Investment in associate	6	**—**	4.6	—
Retirement benefit asset	11	**1.1**	3.4	30.7
Deferred tax assets		**13.9**	16.0	17.3
		172.8	207.1	213.5
Current assets				
Inventories		**59.1**	65.5	58.8
Trade and other receivables		**68.1**	75.1	71.1
Current income tax receivable		**0.2**	0.8	0.2
Derivative financial instruments	10	**1.0**	0.9	0.9
Cash and cash equivalents		**109.3**	42.1	95.4
		237.7	184.4	226.4
Total assets		**410.5**	391.5	439.9
Equity				
Capital and reserves attributable to the Company's equity Shareholders				
Share capital		**2.9**	2.9	2.9
Share premium		**62.4**	61.7	62.2
Other reserves		**0.2**	0.2	0.2
Translation reserve		**9.5**	16.1	11.5
Retained earnings		**164.5**	134.8	174.8
		239.5	215.7	251.6
Liabilities				
Non-current liabilities				
Bank loans		**—**	27.9	—
Lease payables		**5.1**	5.8	6.5
Derivative financial instruments	10	**—**	—	0.9
Provisions		**0.7**	1.0	0.9
Deferred tax liabilities		**1.1**	6.6	10.2
		6.9	41.3	18.5
Current liabilities				
Bank loans		**27.9**	—	27.9
Trade and other payables		**120.4**	109.1	125.1
Lease payables		**2.2**	3.4	2.1
Retirement benefit obligations	11	**—**	0.8	—
Current income tax payables		**4.5**	3.5	4.6
Accrued dividend		**—**	6.1	—
Derivative financial instruments	10	**1.1**	4.2	2.6
Provisions		**8.0**	7.4	7.5
		164.1	134.5	169.8
Total liabilities		**171.0**	175.8	188.3
Total liabilities and equity		**410.5**	391.5	439.9

Consolidated Statement of Cash Flows

Half year ended 30 September 2020 – unaudited

	Note	**Half year to 30 September 2020 £m**	Half year to 30 September 2019 £m	Year to 31 March 2020 £m
Profit for the half year/year		**15.9**	14.2	33.8
Loss/(profit) for the half year/year from discontinued operations	7	**—**	0.7	(1.8)
Profit for the half year/year from continuing operations		**15.9**	14.9	32.0
Adjustments for:				
Income tax expense		**4.3**	4.0	6.8
Net financial expense		**0.6**	0.4	1.0
Fair value movement on financial derivatives		**(0.8)**	2.5	1.4
Restructuring costs		**—**	—	0.2
Adjustments relating to defined benefit pension schemes		**—**	—	(0.6)
Profit on disposal of associate	6	**—**	—	(6.5)
Impairment of inventory		**—**	—	0.4
Impairment of capitalised development costs		**—**	—	7.1
Amortisation of acquired intangibles		**4.3**	4.4	8.7
Depreciation of right-of-use assets		**1.4**	1.5	3.4
Depreciation of property, plant and equipment		**1.7**	1.8	3.5
Amortisation of capitalised development costs		**1.0**	1.2	2.7
Amortisation of capitalised software costs		**—**	—	0.3
Adjusted earnings before interest, tax, depreciation and amortisation		**28.4**	30.7	60.4
Charge in respect of equity settled employee share schemes		**1.1**	2.0	3.1
Share of profit of associate		**—**	—	(0.7)
Restructuring costs received/(paid)		**0.5**	—	(0.6)
Cash payments to the pension scheme more than the charge to operating profit		**(3.7)**	(6.1)	(10.0)
Operating cash flows before movements in working capital		**26.3**	26.6	52.2
Increase in inventories		**(0.6)**	(4.8)	(2.3)
Decrease in receivables		**2.1**	3.5	3.3
(Decrease)/increase in payables and provisions		**(8.4)**	(9.5)	2.5
Increase/(decrease) in customer deposits		**3.9**	(0.5)	6.6
Cash generated from operations		**23.3**	15.3	62.3
Interest paid		**(1.0)**	(1.6)	(1.0)
Income taxes paid		**(4.0)**	(3.5)	(6.1)
Net cash from operating activities – continuing operations		**18.3**	10.2	55.2
Net cash from operating activities – discontinued operations		**—**	0.7	—
Net cash from operating activities		**18.3**	10.9	55.2

	Note	Half year to 30 September 2020 £m	Half year to 30 September 2019 £m	Year to 31 March 2020 £m
Cash flows from investing activities				
Proceeds from sale of property, plant and equipment		**0.1**	—	0.1
Acquisition of property, plant and equipment		**(1.2)**	(1.5)	(4.4)
Net cash flow on disposal of associate		**—**	—	11.7
Capitalised development expenditure		**(0.5)**	(2.2)	(2.8)
Decrease in long-term receivables		**—**	0.5	1.4
Interest received		**—**	0.5	—
Net cash (used in)/generated from investing activities – continuing operations		**(1.6)**	(2.7)	6.0
Net cash generated from investing activities – discontinued operations		**—**	1.0	8.7
Net cash (used in)/generated from investing activities		**(1.6)**	(1.7)	14.7
Cash flows from financing activities				
Proceeds from issue of share capital		**0.1**	—	0.5
Proceeds from exercise of share options		**—**	0.2	0.2
Payments made in respect of lease liabilities		**(1.3)**	(1.4)	(3.3)
Repayment of borrowings		**—**	—	(0.6)
Dividends paid		**—**	(2.2)	(8.2)
Net cash used in financing activities – continuing operations		**(1.2)**	(3.4)	(11.4)
Net cash generated from financing activities – discontinued operations		**—**	0.3	—
Net cash used in financing activities		**(1.2)**	(3.1)	(11.4)
Net increase in cash and cash equivalents		**15.5**	6.1	58.5
Cash and cash equivalents at beginning of the year		**95.4**	35.2	35.2
Effect of exchange rate fluctuations on cash held		**(1.6)**	0.8	1.7
Cash and cash equivalents at end of the period		**109.3**	42.1	95.4

Notes to the Half-year Financial Statements

Half year ended 30 September 2020 – unaudited

1 Basis of preparation

Reporting entity

Oxford Instruments plc is a company incorporated in England and Wales. The condensed consolidated half-year Financial Statements consolidate the results of the Company and its subsidiaries (together referred to as the "Group"). They have been prepared and approved by the Directors in accordance with International Financial Reporting Standard ("IFRS") IAS 34 Interim Financial Reporting as adopted by the EU. They do not include all of the information required for full annual financial statements, and should be read in conjunction with the consolidated Financial Statements of the Group for the year ended 31 March 2020.

The financial information contained herein is unaudited and does not constitute statutory accounts as defined by Section 435 of the Companies Act 2006. The comparative figures for the financial year ended 31 March 2020 are not the Company's statutory accounts for that financial year. Those accounts have been reported on by the Company's auditor and delivered to the registrar of companies. The report of the auditor was (i) unqualified, (ii) did not include a reference to any matters to which the auditors drew attention by way of emphasis without qualifying their report, and (iii) did not contain a statement under Section 498 (2) or (3) of the Companies Act 2006.

Significant accounting policies

As required by the Disclosure Guidance and Transparency Rules of the Financial Conduct Authority, the condensed set of Financial Statements has been prepared applying the accounting policies and presentation that were applied in the preparation of the Company's published consolidated Financial Statements for the year ended 31 March 2020 except as noted below.

Prior period restatement

The prior period to 30 September 2019 has been restated as a result of the Group disposing of the OI Healthcare business in the US on 21 February 2020. Further information can be found in Note 7.

Composition of segments

During the period, the Directors reviewed the composition of the aggregated operating segments. The customer base of the Magnetic Resonance operating segment was found to be more closely aligned to that of the Materials & Characterisation segment and the decision was taken to move the Magnetic Resonance segment from the Research & Discovery segment to the Materials & Characterisation segment. The management of the segment was also realigned at the same time. The segmental information for the prior period has been restated to reflect the amended aggregated operating segments.

The prior year segmental information has also been restated to reflect the disposal of the OI Healthcare business in the US.

Estimates

The preparation of half-year Financial Statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, income and expense. Actual results may differ from these estimates.

In preparing these half-year Financial Statements, the significant judgements made by management in applying the Group's accounting policies and key sources of estimation uncertainty were the same as those that applied to the Consolidated Financial Statements as at and for the year ended 31 March 2020.

Going concern

The condensed consolidated half-year Financial Statements have been prepared on a going concern basis, based on the Directors' opinion, after making reasonable enquiries, that the Group has adequate resources to continue in operational existence for the foreseeable future.

In reaching this opinion the Directors noted that the Group had a net cash balance of £81.4m at 30 September 2020 and generated £18.4m of cash from operating activities in the first half of the year in spite of the disruption to the business caused by covid. In addition, the Directors regularly monitor forward-looking indicators such as order intake which give confidence that not only does the Group have adequate financial resources to continue in operational existence for the foreseeable future, it also has a strong pipeline of opportunities for the future. The Board is satisfied, having considered its funding facilities, as well as the forward-looking indicators, that the Group has adequate resources to continue in operational existence for the foreseeable future.

Exchange rates

The principal exchange rates used to translate the Group's overseas results were as follows:

Period end rates	**Half year to 30 September 2020 £m**	Half year to 30 September 2019 £m	Year to 31 March 2020 £m
US Dollar	**1.29**	1.23	1.24
Euro	**1.10**	1.13	1.13
Japanese Yen	**136**	133	134

Average translation rates	US Dollar	Euro	Japanese Yen
Half year to 30 September 2020			
April	**1.25**	**1.14**	**134**
May	**1.25**	**1.13**	**134**
June	**1.24**	**1.11**	**133**
July	**1.27**	**1.11**	**136**
August	**1.33**	**1.11**	**140**
September	**1.32**	**1.11**	**139**

Average translation rates	US Dollar	Euro	Japanese Yen
Year to 31 March 2020			
April	1.30	1.16	144
May	1.28	1.15	142
June	1.27	1.13	138
July	1.26	1.12	136
August	1.23	1.11	132
September	1.23	1.12	132
October	1.26	1.14	136
November	1.28	1.16	139
December	1.30	1.17	142
January	1.32	1.18	143
February	1.30	1.19	144
March	1.27	1.16	139

Notes to the Half-year Financial Statements continued

Half year ended 30 September 2020 – unaudited

2 Non-GAAP measures

In the preparation of adjusted numbers, the Directors exclude certain items in order to assist with comparability between peers and to give what they consider to be a better indication of the underlying performance of the business. These adjusting items are excluded in the calculation of adjusted operating profit, adjusted profit before tax, adjusted profit for the year from continuing operations, adjusted EBITDA, adjusted EPS, adjusted cash conversion and adjusted effective tax rate. Details of adjusting items are given below.

Adjusted EBITDA is calculated by adding back depreciation of property, plant and equipment, depreciation of right-of-use assets and amortisation of intangible assets to adjusted operating profit, and can be found in the Consolidated Statement of Cash Flows. The calculation of adjusted EPS can be found in Note 3. Adjusted effective tax rate is calculated by dividing the share of tax attributable to adjusted profit before tax by adjusted profit before tax. The definition of cash conversion is set out in the Finance Review.

Reconciliation between operating profit and profit before income tax and adjusted profit from continuing operations

	Half year to 30 September 2020		Half year to 30 September 2019 as restated		Year to 31 March 2020	
	Operating profit £m	**Profit before income tax £m**	Operating profit £m	Profit before income tax £m	Operating profit £m	Profit before income tax £m
Statutory measure from continuing operations	**20.8**	**20.2**	19.3	18.9	39.8	38.8
Restructuring costs	**–**	**–**	–	–	0.2	0.2
Business reorganisation items	**–**	**–**	–	–	0.2	0.2
Adjustments relating to defined benefit pension schemes	**–**	**–**	–	–	(0.6)	(0.6)
Impairment of inventory	**–**	**–**	–	–	0.4	0.4
Impairment of capitalised development costs	**–**	**–**	–	–	7.1	7.1
Profit on disposal of associate	**–**	**–**	–	–	(6.5)	(6.5)
Amortisation of acquired intangibles	**4.3**	**4.3**	4.4	4.4	8.7	8.7
Fair value movement on financial derivatives	**(0.8)**	**(0.8)**	2.5	2.5	1.4	1.4
Total non-GAAP adjustments	**3.5**	**3.5**	6.9	6.9	10.7	10.7
Adjusted measure from continuing operations	**24.3**	**23.7**	26.2	25.8	50.5	49.5
Income tax expense		**(4.9)**		(5.2)		(9.3)
Adjusted profit for the year from continuing operations	**24.3**	**18.8**	26.2	20.6	50.5	40.2
Adjusted effective tax rates		**20.7%**		20.2%		18.8%

Restructuring costs

These represent the costs of one-off changes to senior management within the Research & Discovery segment.

Adjustments relating to defined benefit pension schemes

During the year ended 31 March 2020, the Group recognised a one-off accounting gain on the termination of its US defined benefit pension scheme.

Impairment of inventory

During the year ended 31 March 2020, the Group implemented a new ERP system at a site within the Research & Discovery division. In reconciling the inventory on the new system, a need for an impairment in respect of certain historic inventory differences was identified. This was treated as an adjusting item due to its one-off nature.

Impairment of capitalised development costs

During the year ended 31 March 2020, the Group reviewed the capitalised development costs to ensure they remained directly related to targeted product or software developments. The one-off non-cash impairment relates to the Materials & Characterisation segment, comprising software intangibles in Asylum Research, historical balances on general process development in Plasma Technology and product development in NanoAnalysis that has been affected by a reduction in orders as a result of covid.

Profit on disposal of associate

During the year the Group made a profit on disposal of its shareholding in Scienta Scientific AB. See Note 6. This has been treated as an adjusting item due to its non-recurring nature.

Amortisation and impairment of acquired intangibles

Adjusted profit excludes the non-cash amortisation and impairment of acquired intangible assets and goodwill.

Fair value movement on financial derivatives

Under IFRS 9, all derivative financial instruments are recognised initially at fair value. Subsequent to initial recognition, they are also measured at fair value. In respect of instruments used to hedge foreign exchange risk and interest rate risk, the Group does not take advantage of the hedge accounting rules provided for in IFRS 9 since that standard requires certain stringent criteria to be met in order to hedge account, which, in the particular circumstances of the Group, are considered by the Board not to bring any significant economic benefit. Accordingly, the Group accounts for these derivative financial instruments at fair value through profit or loss. To the extent that instruments are hedges of future transactions, adjusted profit for the year is stated before changes in the valuation of these instruments so that the underlying performance of the Group can be more clearly seen.

Share of taxation

Adjusting items include the income tax on each of the items described above.

Reconciliation of changes in cash and cash equivalents to movement in net cash

	Half year to 30 September 2020 £m	Half year to 30 September 2019 £m	Year to 31 March 2020 £m
Net increase in cash and cash equivalents	**15.5**	6.1	58.5
Effect of exchange rate fluctuations on cash held	**(1.6)**	0.8	1.7
	13.9	6.9	60.2
Repayment of borrowings	**—**	—	0.6
Movement in accrued interest	**—**	0.6	—
Movement in net cash in the half year	**13.9**	7.5	60.8
Net cash at start of the year	**67.5**	6.7	6.7
Net cash at the end of the half year	**81.4**	14.2	67.5

Reconciliation of net cash to Statement of Financial Position

	Half year to 30 September 2020 £m	Half year to 30 September 2019 £m	Year to 31 March 2020 £m
Loan notes – unsecured	**(27.9)**	(27.9)	(27.9)
Cash and cash equivalents	**109.3**	42.1	95.4
Net cash at the end of the half year	**81.4**	14.2	67.5

Half year ended 30 September 2020 – unaudited

3 Earnings per share

Basic and diluted EPS from continuing operations are based on the result for the year from continuing operations, as reported in the Group Income Statement. Basic and diluted EPS from total operations are based on the result for the year attributable to equity Shareholders of the parent. Adjusted and diluted adjusted EPS are based on adjusted profit for the year from continuing operations. The profit measures noted above are divided by the weighted average number of ordinary shares outstanding during the year, excluding shares held by the Employee Share Ownership Trust. The table below reconciles these different profit measures.

	Half year to 30 September 2020 £m	Half year to 30 September 2019 as restated £m	Year to 31 March 2020 £m
Profit for the year attributable to equity Shareholders of the parent	**15.9**	14.2	33.8
Discontinued operations	**—**	0.7	(1.8)
Adjusting items:			
Business reorganisation items	**—**	—	0.2
Adjustments relating to defined benefit pension schemes	**—**	—	(0.6)
Impairment of inventory	**—**	—	0.4
Impairment of capitalised development costs	**—**	—	7.1
Profit on disposal of associate	**—**	—	(6.5)
Amortisation of acquired intangibles	**4.3**	4.4	8.7
Fair value movement on financial derivatives	**(0.8)**	2.5	1.4
Adjusted income tax expense	**(0.6)**	(1.2)	(2.5)
Adjusted profit for the year from continuing operations	**18.8**	20.6	40.2

The weighted average number of shares used in the calculation excludes shares held by the Employee Share Ownership Trust, and is as follows:

	Half year to 30 September 2020 Shares million	Half year to 30 September 2019 Shares million	Year to 31 March 2020 Shares million
Weighted average number of shares outstanding	**57.4**	57.4	57.4
Less: weighted average number of shares held by Employee Share Ownership Trust	**(0.1)**	(0.2)	(0.1)
Weighted average number of shares used in calculation of basic earnings per share	**57.3**	57.2	57.3

The following table shows the effect of share options on the calculation of diluted earnings per share:

	Half year to 30 September 2020 Shares million	Half year to 30 September 2019 Shares million	Year to 31 March 2020 Shares million
Number of ordinary shares per basic earnings per share calculations	**57.3**	57.2	57.3
Effect of shares under option	**0.7**	0.6	0.6
Number of ordinary shares per diluted earnings per share calculations	**58.0**	57.8	57.9

For the purposes of calculating diluted and diluted adjusted EPS, the weighted average number of ordinary shares is adjusted to include the weighted average number of ordinary shares that would be issued on the conversion of all potentially dilutive ordinary shares expected to vest, relating to the Company's share-based payment plans. Potential ordinary shares are only treated as dilutive when their conversion to ordinary shares would decrease EPS or increase loss per share.

4 Segment information

The Group has eight operating segments. These operating segments have been combined into three aggregated operating segments to the extent that they have similar economic characteristics, with relevance to products and services, type and class of customer, methods of sale and distribution and the regulatory environment in which they operate. Each of these three aggregated operating segments is a reportable segment. The aggregated operating segments are as follows:

- the Materials & Characterisation segment comprises a group of businesses focusing on applied R&D and commercial customers, enabling the fabrication and characterisation of materials and devices down to the atomic scale;
- the Research & Discovery segment comprises a group of businesses providing advanced solutions that create unique environments and enable measurements down to the molecular and atomic level which are used in fundamental research; and
- the Service & Healthcare segment provides customer service and support for the Group's products and the service of third-party healthcare imaging systems.

The Group's internal management structure and financial reporting systems have been amended to differentiate the three aggregated operating segments based on the economic characteristics discussed above.

Reportable segment results include items directly attributable to a segment as well as those which can be allocated on a reasonable basis. Inter-segment pricing is determined on an arm's length basis. The operating results of each are regularly reviewed by the Chief Operating Decision Maker, which is deemed to be the Board of Directors. Discrete financial information is available for each segment and used by the Board of Directors for decisions on resource allocation and to assess performance. No asset information is presented below as this information is not presented in reporting to the Group's Board of Directors.

The results of the half year to 30 September 2019 and year to 31 March 2020 have been restated to reflect Magnetic Resonance moving from the Research & Discovery segment to the Materials & Characterisation segment. Further information can be found in Note 1.

The results of the half year to 30 September 2019 have been restated to reflect the classification of the OI Healthcare business as a discontinued operation. OI Healthcare was included within the Service & Healthcare aggregated operating segment. Further information can be found in Note 7.

Results from continuing operations

Half year to 30 September 2020	**Materials & Characterisation £m**	**Research & Discovery £m**	**Service & Healthcare £m**	**Total £m**
Total segment revenue	**65.2**	**48.3**	**26.8**	**140.3**
Segment adjusted operating profit from continuing operations	**8.9**	**6.4**	**9.0**	**24.3**

Half year to 30 September 2019 as restated	Materials & Characterisation £m	Research & Discovery £m	Service & Healthcare £m	Total £m
Total segment revenue	73.2	57.8	26.6	157.6
Segment adjusted operating profit from continuing operations	12.2	6.4	7.6	26.2

Year to 31 March 2020 as restated	Materials & Characterisation £m	Research & Discovery £m	Service & Healthcare £m	Total £m
Total segment revenue	145.8	117.8	53.8	317.4
Segment adjusted operating profit from continuing operations	21.0	14.5	15.0	50.5

Reconciliation of reportable segment profit from continuing operations

Half year to 30 September 2020	**Materials & Characterisation £m**	**Research & Discovery £m**	**Service & Healthcare £m**	**Unallocated Group items £m**	**Total £m**
Segment adjusted operating profit from continuing operations	**8.9**	**6.4**	**9.0**	**—**	**24.3**
Amortisation of acquired intangibles	**(1.1)**	**(3.2)**	**—**	**—**	**(4.3)**
Fair value movement on financial derivatives	**—**	**—**	**—**	**0.8**	**0.8**
Financial income	**—**	**—**	**—**	**0.5**	**0.5**
Financial expenditure	**—**	**—**	**—**	**(1.1)**	**(1.1)**
Profit before income tax from continuing operations	**7.8**	**3.2**	**9.0**	**0.2**	**20.2**

4 Segment information continued

Reconciliation of reportable segment profit from continuing operations continued

Half year to 30 September 2019 as restated	Materials & Characterisation £m	Research & Discovery £m	Service & Healthcare £m	Unallocated Group items £m	Total £m
Segment adjusted operating profit from continuing operations	12.2	6.4	7.6	—	26.2
Amortisation of acquired intangibles	(1.2)	(3.2)	—	—	(4.4)
Fair value movement on financial derivatives	—	—	—	(2.5)	(2.5)
Financial income	—	—	—	0.5	0.5
Financial expenditure	—	—	—	(0.9)	(0.9)
Profit/(loss) before income tax from continuing operations	11.0	3.2	7.6	(2.9)	18.9

Year to 31 March 2020 as restated	Materials & Characterisation £m	Research & Discovery £m	Service & Healthcare £m	Unallocated Group items £m	Total £m
Segment adjusted operating profit from continuing operations	21.0	14.5	15.0	—	50.5
Restructuring costs	(0.1)	(0.1)	—	—	(0.2)
Adjustments relating to defined benefit pension schemes	—	—	—	0.6	0.6
Impairment of inventory	—	(0.4)	—	—	(0.4)
Impairment of capitalised development costs	(6.3)	(0.8)	—	—	(7.1)
Profit on disposal of associate	—	6.5	—	—	6.5
Amortisation of acquired intangibles	(2.3)	(6.4)	—	—	(8.7)
Fair value movement on financial derivatives	—	—	—	(1.4)	(1.4)
Financial income	—	—	—	0.3	0.3
Financial expenditure	—	—	—	(1.3)	(1.3)
Profit/(loss) before income tax from continuing operations	12.3	13.3	15.0	(1.8)	38.8

5 Research and development ("R&D")

The total adjusted research and development spend by the Group is as follows:

	Half year to 30 September 2020 £m	Half year to 30 September 2019 £m	Year to 31 March 2020 £m
R&D expense charged to the Consolidated Statement of Income	**13.2**	11.9	26.6
Add: amounts capitalised as fixed assets	**—**	0.1	0.1
Less: amortisation of R&D costs previously capitalised as intangibles	**(1.0)**	(1.2)	(2.7)
Add: amounts capitalised as intangible assets	**0.5**	2.2	2.8
Total cash spent on R&D during the year	**12.7**	13.0	26.8

6 Investment in associate

The Group held a 47% interest in the ordinary share capital of Scienta Scientific AB. Scienta Scientific AB is registered and has its principal place of business in Sweden. On 28 January 2020, the Group sold its holdings in Scienta Scientific AB for £11.7m in cash.

The Group's share of profit in its equity accounted associate for the prior half year was £nil and for the period to 28 January 2020 was £0.7m. The Group did not receive any dividend from the associate in the current or prior periods.

The profit on disposal recognised in the accounts to 31 March 2020 was £6.5m.

7 Disposal of subsidiary and discontinued operations

On 21 February 2020, the Group disposed of its OI Healthcare business in the US for a final consideration of $14.9m, of which $1.5m is held in escrow for twelve months pending any claims from the purchaser.

In the year to 31 March 2020 the OI Healthcare business was classified as a discontinued operation. It was considered a major class of business on the basis of its size and that it was previously an operating segment and referred to in the Group's Strategic Report.

The 2019 half-year results have been restated to reflect the classification of the OI Healthcare business as a discontinued operation.

During the current period to 30 September 2020 there were no transactions relating to discontinued operations.

Results of discontinued operations	Half year to 30 September 2020 OI Healthcare £m	Half year to 30 September 2020 Industrial Analysis £m	Half year to 30 September 2019 as restated OI Healthcare £m	Half year to 30 September 2019 Industrial Analysis £m
Revenue	—	—	8.7	—
Expenses	—	—	(9.1)	—
Adjusted loss before tax	—	—	(0.4)	—
Income tax credit	—	—	0.1	—
Adjusted loss after tax	—	—	(0.3)	—
Adjusting items:				
Amortisation of acquired intangibles	—	—	(0.5)	—
Income tax on adjusting items	—	—	0.1	—
Loss from discontinued operations after tax	—	—	(0.7)	—

Results of discontinued operations	Year to 31 March 2020 OI Healthcare £m	Year to 31 March 2020 Industrial Analysis £m
Revenue	14.8	—
Expenses	(15.5)	—
Adjusted loss before tax	(0.7)	—
Income tax credit	0.2	—
Adjusted loss after tax	(0.5)	—
Adjusting items:		
Restructuring costs	(0.1)	(0.2)
Amortisation of acquired intangibles	(0.8)	—
Income tax on adjusting items	0.3	—
Loss after tax	(1.1)	(0.2)
Gain on disposal	3.1	—
Profit/(loss) from discontinued operations after tax	2.0	(0.2)

7 Disposal of subsidiary and discontinued operations continued

Cash flows from discontinued operations	Half year to 30 September 2020 £m	Half year to 30 September 2019 as restated £m	Year to 31 March 2020 £m
Net cash generated from operating activities	—	0.7	—
Net cash generated from investing activities	—	1.0	8.7
Net cash used in financing activities	—	0.3	—

Earnings per share from discontinued operations	Half year to 30 September 2020 pence	Half year to 30 September 2019 as restated pence	Year to 31 March 2020 pence
Adjusted basic loss per share	—	(0.5)	(0.9)
Adjusted diluted loss per share	—	(0.5)	(0.9)
Total basic loss per share	—	(1.2)	3.1
Total diluted loss per share	—	(1.2)	3.1

8 Taxation

The total effective tax rate on profits for the half year is 21.3% (prior half year as restated: 21.2%). The weighted average tax rate in respect of adjusted profit before tax (see Note 2) for the half year is 20.7% (prior half year as restated: 20.2%).

For the full year the Group expects the tax rate in respect of adjusted profit before tax to be 21.0%.

9 Dividends per share

The following dividends per share were paid by the Group:

	Half year to 30 September 2020 pence	Half year to 30 September 2019 pence	Year to 31 March 2020 pence
Previous period interim dividend	—	3.8	3.8
Previous period final dividend	—	—	10.6
	—	3.8	14.4

The following dividends per share were proposed by the Group in respect of each accounting period presented:

	Half year to 30 September 2020 pence	Half year to 30 September 2019 pence	Year to 31 March 2020 pence
Interim dividend	**4.1**	4.1	4.1
Final dividend	—	—	—
	4.1	4.1	4.1

The interim dividend for the year to 31 March 2020 of 4.1p was approved by the Board on 12 November 2019, and had been intended to be paid on 14 April 2020 to Shareholders on the register at close of business on 6 March 2020. On 30 March 2020, the Board decided to suspend payment of this dividend. Subsequently, the Board has decided not to pay this dividend.

The interim dividend for the year to 31 March 2021 of 4.1p was approved by the Board on 9 November 2020 and has not been included as a liability as at 30 September 2020. The interim dividend will be paid on 14 April 2021 to Shareholders on the register at the close of business on 5 March 2021.

10 Financial instruments

Fair values of financial assets and liabilities

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including their levels in the fair value hierarchy. It does not include fair value information for financial assets and financial liabilities not measured at fair value if the carrying amount is a reasonable approximation of fair value.

		Half year to 30 September 2020		Half year to 30 September 2019		Year to 31 March 2020	
	Fair value hierarchy	**Carrying amount £m**	**Fair value £m**	Carrying amount £m	Fair value £m	Carrying amount £m	Fair value £m
Assets carried at amortised cost							
Trade receivables		**54.4**		63.4		59.7	
Other receivables		**9.7**		7.0		7.7	
Cash and cash equivalents		**109.3**		42.1		95.4	
Assets carried at fair value							
Derivative financial instruments:							
– Foreign currency contracts	2	**1.0**	**1.0**	0.9	0.9	0.9	0.9
Liabilities carried at fair value							
Derivative financial instruments:							
– Foreign currency contracts	2	**(1.1)**	**(1.1)**	(4.2)	(4.2)	(3.5)	(3.5)
Liabilities carried at amortised cost							
Trade and other payables		**(57.5)**		(56.6)		(65.9)	
Bank loans		**(27.9)**		(27.9)		(27.9)	
Lease payables		**(7.3)**		(9.2)		(8.6)	

The following summarises the major methods and assumptions used in estimating the fair values of financial instruments reflected in the above table.

Derivative financial instruments

Derivative financial instruments are marked-to-market using market prices.

Fixed and floating rate borrowings

The fair value of fixed and floating rate borrowings is estimated by discounting the future contracted principal and interest cash flows using the market rate of interest at the reporting date.

Trade and other receivables/payables

For receivables/payables with a remaining life of less than one year, the carrying amount is deemed to reflect the fair value. All other receivables/payables are discounted to determine their fair value. Advances received are excluded from other payables above as these are not considered to be financial liabilities.

Lease payables

The lease liability is measured at amortised cost using the effective interest method.

Fair value hierarchy

The table above gives details of the valuation method used in arriving at the fair value of financial instruments. The different levels have been identified as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3: inputs for the asset or liability that are not based on observable market data.

There have been no transfers between levels during the year.

Half year ended 30 September 2020 – unaudited

11 Retirement benefit obligations

The Group operates a defined benefit plan in the UK. A full actuarial valuation of the UK plan was carried out as at 31 March 2018 which, for reporting purposes, has been updated to 30 September 2020 by a qualified independent actuary.

At 31 March 2020, the scheme actuary calculated a retirement benefit asset of £30.7m. In the period to 30 September 2020, there has been a significant fall in corporate bond yields, which reduced the discount rate from 2.5% to 1.6%, and an increase in the assumed level of CPI and RPI inflation rates by 0.3% (to 2.2% and 2.9% from 1.9% and 2.6% respectively at 31 March 2020). The impact of these changes has increased the benefit obligation to £351.8m (31 March 2020: £290.7m).

The Group has agreed a basis for deficit recovery payments with the trustees of the UK pension scheme. The deficit recovery payments are payable through to and including 2026 and will rise by approximately 3% per annum. The deficit recovery payment for the period was £3.9m (year to 31 March 2020: £7.6m). In addition, the scheme's assets generated a higher return than the discount rate. As a result, the fair value of plan assets increased to £352.9m (31 March 2020: £321.4m).

The overall effect is that for the purposes of IAS 19 the surplus on the scheme reduced from £30.7m to £1.1m.

12 Related parties

All transactions with related parties are conducted on an arm's length basis and in accordance with normal business terms. Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this Note.

Included in the Consolidated Statement of Financial Position at 30 September 2019 was a current loan receivable of £0.8m due from Scienta Scientific AB. The loan was repaid in February 2020. During the prior period to 30 September 2019, the Group received interest charged on the loan of £0.1m (year to 31 March 2020: £0.1m).

Independent Review Report

to Oxford Instruments plc

Introduction

We have been engaged by the Company to review the condensed set of Financial Statements in the half-yearly financial report for the six months ended 30 September 2020 which comprises the Condensed Consolidated Statement of Income, Condensed Consolidated Statement of Comprehensive Income, Condensed Consolidated Statement of Changes in Equity, Condensed Consolidated Statement of Financial Position and Condensed Consolidated Statement of Cash Flows.

We have read the other information contained in the half-yearly financial report and considered whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of Financial Statements.

Directors' responsibilities

The half-yearly financial report is the responsibility of and has been approved by the Directors. The Directors are responsible for preparing the half-yearly financial report in accordance with the Disclosure Guidance and Transparency Rules of the United Kingdom's Financial Conduct Authority.

As disclosed in Note 1, the annual Financial Statements of the Group are prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. The condensed set of Financial Statements included in this half-yearly financial report has been prepared in accordance with International Accounting Standard 34, ''Interim Financial Reporting'', as adopted by the European Union.

Our responsibility

Our responsibility is to express to the Company a conclusion on the condensed set of Financial Statements in the half-yearly financial report based on our review.

Scope of review

We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2410, ''Review of Interim Financial Information Performed by the Independent Auditor of the Entity'', issued by the Financial Reporting Council for use in the United Kingdom. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of Financial Statements in the half-yearly financial report for the six months ended 30 September 2020 is not prepared, in all material respects, in accordance with International Accounting Standard 34, as adopted by the European Union, and the Disclosure Guidance and Transparency Rules of the United Kingdom's Financial Conduct Authority.

Use of our report

Our report has been prepared in accordance with the terms of our engagement to assist the Company in meeting its responsibilities in respect of half-yearly financial reporting in accordance with the Disclosure Guidance and Transparency Rules of the United Kingdom's Financial Conduct Authority and for no other purpose. No person is entitled to rely on this report unless such a person is a person entitled to rely upon this report by virtue of and for the purpose of our terms of engagement or has been expressly authorised to do so by our prior written consent. Save as above, we do not accept responsibility for this report to any other person or for any other purpose and we hereby expressly disclaim any and all such liability.

BDO LLP
Chartered Accountants
Reading, UK

10 November 2020

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127).

Directors and Advisers

Honorary President
Sir Martin Wood OBE FRS Hon FREng DL

Company Secretary
Susan Johnson-Brett ACIS

Company number
Registered in England and Wales number 775598

Board Committees

Audit and Risk
Mary Waldner, Chair
Steve Blair
Richard Friend
Thomas Geitner
Alison Wood

Nomination
Neil Carson, Chair
Steve Blair
Richard Friend
Thomas Geitner
Mary Waldner
Alison Wood

Remuneration
Thomas Geitner, Chair
Steve Blair
Neil Carson
Richard Friend
Mary Waldner
Alison Wood

Administration
Any two Directors

Auditor
BDO LLP (from 1 April 2020)

Principal bankers
HSBC Bank plc
Santander plc

Stockbroker
JPMorgan Cazenove

UK solicitors
Ashurst LLP

US counsel
Wilmer Hale LLP

Designed and produced by
lyonsbennett

www.lyonsbennett.com

Find out more online

www.oxinst.com/investors

For more information please email: info.oiplc-web@oxinst.com