Genus

For Immediate Release   8 September 2020

Genus plc
Preliminary results for the year ended 30 June 2020

STRONG PERFORMANCE, RESILIENT OPERATIONS DURING THE COVID-19 PANDEMIC

	Adjusted results[1]				Statutory results		
	Actual currency			Constant currency change[2]	Actual currency		
Year ended 30 June	**2020**	**2019**	**Change**		**2020**	**2019**	**Change**
	£m	**£m**	**%**	**%**	**£m**	**£m**	**%**
Revenue	**551.4**	488.5	13	13	**551.4**	488.5	13
Operating profit exc JVs	**65.3**	57.7	13	16	**47.6**	8.7	447
Operating profit inc JVs exc gene editing	**81.2**	72.2	12	17	**n/a**	n/a	n/a
Profit before tax	**71.0**	61.0	16	22	**51.5**	9.9	420
Free cash flow	**35.2**	10.0	252	n/m[3]			
Basic earnings per share (pence)	**85.4**	73.2	17	23	**62.4**	12.4	403
Dividend per share (pence)					**29.1**	27.7	5

Strong revenue growth of 13% in actual and constant currency[2]
- Excellent performance in PIC, our porcine genetics business, with revenue up 17%[2]; royalty revenues grew 11%[2] with growth in all regions
- High breeding stock sales and royalties in China drove PIC volume growth of 13%, 6% excluding China
- Strong revenue growth in ABS, our bovine genetics business, of 9%[2], driven by Sexcel®, our sexed product
- ABS volume growth of 8%, with sexed volumes up 47% and beef up 17%

Very strong adjusted profit before tax ('PBT')[1], up 22% in constant currency; statutory PBT at £51.5m
- Adjusted operating profit including joint ventures and excluding gene editing[1] up 17%[2]
- Double digit adjusted operating profit growth[1] in PIC (up 25%[2]) and ABS (up 12%[2]); R&D investment increased 17%[2]
- Statutory PBT includes a £15.8m uplift in net IAS 41 biological asset valuation and £19.2m of exceptional costs, compared with a reduced asset valuation and higher exceptional costs in the prior year
- Foreign currency translation impact on adjusted PBT of £3.4m primarily reflecting weakness in LATAM currencies

Strong cash generation, earnings and dividends, and new revolving credit facility ('RCF')
- Strong free cash flow[1] of £35.2m, net debt[1] of £102.6m (inc £24.7m IFRS 16 adoption), net debt to EBITDA[1] of 0.9x
- New enlarged credit facility completed 24 August 2020; £150m multi-currency RCF, a USD125m RCF and a USD20m bond and guarantee facility for a three-year term with two one-year extension options
- Very strong financial position with high operating cash flows and significant borrowings headroom enables flexibility to invest further in growth
- Adjusted earnings per share[1] up 23% in constant currency; dividend up 5% with 2.9x adjusted earnings cover[1]

Good strategic progress despite COVID-19
- During the COVID-19 pandemic Genus has been committed to the health and safety of its people, customers and communities throughout its global markets
- More than doubled size of PIC China's supply chain to capture opportunity of re-stocking post African Swine Fever ('ASF')
- PIC's collaboration with Beijing Capital Agribusiness Co. Ltd ('BCA') is progressing well with receipt of the first milestone payment of USD7m (net income £3.2m) received in January 2020
- Expanded sexed product capacity including new sites, and driving performance through continued technology improvements

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[1] Adjusted results are the Alternative Performance Measures ('APMs') used by the Board to monitor underlying performance at a Group and operating segment level, which are applied consistently throughout. These APMs should be considered in addition to, and not as a substitute for or as superior to statutory measures. For more information on APMs, see APM Glossary.

[2] All growth rates quoted are in constant currency unless otherwise stated. Constant currency percentage movements are calculated by restating the results for the year ended 30 June 2020 at the average exchange rates applied to adjusted operating profit for the year ended 30 June 2019.

[3] n/m = not meaningful

- Completed a two year trial of NuEra®, our beef-on-dairy genetics demonstrating a material value proposition for the beef industry
- Continued progress as planned with the Porcine Reproductive Respiratory Syndrome virus ('PRRSv') development programme, first Food and Drug Administration ('FDA') filing completed
- Market leading genetic portfolio across the Group enabling broad based market share gains

Stephen Wilson, Chief Executive, commenting on the performance and outlook said:

"Genus performed strongly and made substantial strategic progress throughout the 2020 fiscal year. In the second half the Group showed its resilience following the outbreak of the COVID-19 pandemic. Our customers experienced challenges due to the unprecedented market price and demand volatility as protein supply chains were disrupted in some markets. I am proud of the way our people responded and supported our customers through this period. We had to adapt in many ways to ensure that we could continue to supply our customers in the face of extraordinary circumstances, but through the ingenuity and determination of our people we have been able to keep operating uninterrupted during the crisis. This has been achieved while continually focusing on protecting our employees, customers and other stakeholders."

"PIC continued to benefit from strong demand for its genetics in China, due to re-stocking, as large customers replenished and grew their herds following the spread of African Swine Fever ('ASF') in 2019. PIC also achieved strong growth in other regions and is clearly gaining market share due to the strength of its genetics."

"ABS continued to grow strongly, driven by a combination of the success of Sexcel and NuEra®, our proprietary beef genetics. The beef and dairy markets have seen extreme volatility in prices during the COVID-19 pandemic, and engaging with customers and prospects has been challenging at times. Despite this ABS won significant new customers in all the regions."

"COVID-19 has had a significant impact on the world economy and consumer incomes, and the pandemic has also caused operational challenges for elements of the animal protein value chain, most notably meat processors in the US. We expect these challenges to have a continuing impact for our customers in FY21 and greater currency headwinds are anticipated. However, Genus's business model and strategy has again demonstrated its robustness and we anticipate further growth in constant currency across the business in the coming year and to perform in line with our expectations."

Results presentation today

A pre-recorded analysts and bankers briefing to discuss the preliminary results for the year ended 30 June 2020 will be held via a video webcast facility and will be accessible via the following link from 7:01am today: https://webcasting.buchanan.uk.com/broadcast/5f28011c65023062edd7e24a.

This will be followed by a live Q&A session to be held by invitation via Microsoft Teams at 10:30am.

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About Genus

Genus advances animal breeding and genetic improvement by applying biotechnology and sells added value products for livestock farming and food producers. Its technology is applicable across livestock species and is currently commercialised by Genus in the dairy, beef and pork food production sectors.

Genus's worldwide sales are made in over 80 countries under the trademarks 'ABS' (dairy and beef cattle) and 'PIC' (pigs) and comprise semen, embryos and breeding animals with superior genetics to those animals currently in farms. Genus's customers' animals produce offspring with greater production efficiency and quality, and our customers use them to supply the global dairy and meat supply chains.

Genus’s competitive edge comes from the ownership and control of proprietary lines of breeding animals, the biotechnology used to improve them and its global supply chain, technical service and sales and distribution network.

Headquartered in Basingstoke, United Kingdom, Genus companies operate in over 25 countries on six continents, with research laboratories located in Madison, Wisconsin, USA.

Chief Executive's Review

This is my first report to you as the Chief Executive of Genus, having taken up the position in September 2019, after more than six years as Group Finance Director, and it is a true privilege to lead this company. Genus provides a vital service to an essential industry and in doing so plays a key role in helping to nourish the world. We have a fantastic team of talented, expert and passionate people and our portfolio of elite animal genetics is the strongest it has ever been.

Our current position reflects the success of our ongoing strategy over recent years, which is to increase genetic control and product differentiation, deliver value in key markets and segments, and share in the value delivered. Our consistent vision of 'Pioneering animal genetic improvement to help nourish the world' and our strong core values drive all that we do. At the same time, we must continue to adapt to a changing world, so we are placing even greater emphasis on environmental sustainability, both in the way we run the business and in the benefits our genetics deliver in enabling more sustainable production of high-quality animal protein. Innovation is another important area of focus. Genus has always been an innovative company but the biological sciences move quickly and we need to ensure we remain at the forefront of applying new ideas in our industry to the benefit of our customers.

The Group showed its resilience following the outbreak of the COVID-19 pandemic. This disrupted protein supply chains and some of our customers experienced unprecedented market price and demand volatility. I am proud of the way our people responded to the many challenges and we have been able to keep operating essentially uninterrupted throughout the crisis, while continually focusing on protecting the health of our employees and other stakeholders.

Group Performance

Performance in the year was strong, with revenue increasing by 13%, and adjusted profit before tax growing 16% (22% in constant currency), to a record £71.0m.

Genus PIC was the major contributor to that growth, as it benefited as expected from strong demand in China as large producers expanded to fill the supply shortfall caused by African Swine Fever in 2019. Europe and Latin America also contributed strong growth, resulting in PIC's adjusted operating profit including joint ventures being 25% higher in constant currency. Strategically important porcine royalty revenue was up 11% in constant currency, with growth in all regions, contributing to total porcine revenue increasing by 17% in constant currency.

Genus ABS achieved volume growth of 8% and adjusted operating profit growth of 12% in constant currency. This was driven mainly by the growth in sexed product, with sexed volumes up 47%, and continued growth in the use of beef genetics in dairy herds, with global beef volumes up 17%. ABS benefited from our investment in sales capability and the shift to long-term partnership accounts, particularly in the US. Performance was also particularly strong in Brazil, Russia, India and China.

R&D is the lifeblood of our business and we increased net investment by 19% (17% in constant currency) as planned, largely driven by increased investment in porcine product development as we look to further strengthen our proprietary genetics and build capacity for future growth. We will continue to increase investment in gene editing and IntelliGen® production capacity, as well as further developing our R&D pipeline.

Continued Strategic Progress

Our strategic investments in our proprietary pork, dairy and beef breeding programmes and our leading sexing technology continue to reap rewards and we advanced our strategy on a number of fronts during the year. Our PRRSv resistance programme made progress as planned and we received our first milestone payment from BCA, our collaboration partner on PRRSv in China. Also in China, we were able to more than double PIC's supply chain capacity, primarily by using our customers' systems and joint ventures to multiply our genetics, positioning Genus to provide elite genetics to more large commercial farms in the country. Meanwhile, our porcine R&D is delivering historically high rates of genetic improvement, supporting business growth and market share gains.

In ABS, we opened further production capacity in Wisconsin to support the ongoing growth in sexed semen volumes, which continue to outperform. In addition, we opened further new state of the art barns to house our elite genetics. Our bovine product development is expanding its industry leading position in Holstein dairy genetics and we used a two year long product trial through the commercial beef supply chain to validate the superior growth, feed efficiency and yields provided by our beef genetics programme. The results of this trial showed the significant benefit of our genetics.

The implementation of Genus One, our new enterprise system, is progressing well. We achieved our first major 'go live' in PIC North America and are well progressed on roll outs to further business areas over the coming year. Ultimately when fully implemented we will reap benefits through leveraging one global system in our operations.

People

As announced on 29 June 2020, Bob Lawson will be standing down as Chairman at the AGM in November 2020. On behalf of the Board and all of my Genus colleagues, I want to thank him warmly for his wise counsel and great leadership during his 10 years on the Board. He has played an integral role in Genus's transformation into the world-leading company it is today. I also want to welcome Iain Ferguson, who joined the Board in July 2020 and will become Chairman after the AGM. We are already benefitting from his very relevant experience and counsel.

The other change to the Board of Directors and membership of GELT during the year was the appointment of Alison Henriksen as Chief Financial Officer. Alison joined us in January 2020 and her commercial and financial expertise is already proving highly valuable to us. I also want to thank Janet Duane, our Financial Controller, who very ably stepped up to be acting CFO in the period before Alison joined us. As previously reported, Dr Elena Rice joined us as Chief Scientific Officer and Head of Research and Development in July 2019.

Genus employs more than 3,100 people around the world. I want to thank them all for their contribution to our success this year, particularly so in the environment resulting from COVID-19. We are fortunate that our people could continue to carry out their roles during the pandemic and no government aid for wages was sought. While our business is animal genetic improvement, we only succeed because of the talents and dedication of our people. The global Your Voice survey we conducted in November showed that employee engagement remains high and we continue to nurture our positive and inclusive culture and to attract new talent to support our strategic objectives.

Outlook

The full impact of COVID-19 on the world economy and consumer incomes remains unclear, although economic forecasts suggest that many sectors will be heavily impacted for some time, creating economic recession in many countries. The pandemic has also caused operational challenges for elements of the animal protein value chain, most notably meat processors in the US which are likely to continue for some time, leading to challenging conditions for some of our customers through at least the remainder of 2020. Greater currency headwinds are also anticipated in FY21. However, Genus's business model and strategy has again demonstrated its robustness and we anticipate further growth in constant currency in the business in the coming year and to perform in line with our expectations.

Stephen Wilson

Chief Executive

7 September 2020

Financial and Operating Review

Financial Review

In the year ended 30 June 2020, Genus achieved a strong financial performance whilst operating in unique circumstances during the second half of the financial year caused by the COVID-19 pandemic. The resilience of our operations was reflected in revenue growth of 13% in both constant and actual currency. Adjusted operating profit growth including joint ventures was 22% in constant currency (17% in actual currency). Notably, this was after a significant planned increase in R&D investment of 17% in constant currency (19% in actual currency to £65.2m) primarily to fund expansion in our porcine nucleus herds. Excluding gene editing costs, adjusted operating profit including joint ventures increased by 17% in constant currency and adjusted profit before tax was up 22% (16% in actual currency).

On a statutory basis, profit before tax was £51.5m (2019: £9.9m). The difference between statutory and adjusted profit before tax principally reflected the uplift in the non-cash fair value net IAS 41 biological asset movement versus a decrease last year. Basic earnings per share on a statutory basis were 62.4 pence (2019: 12.4 pence).

Genus continues to report adjusted results as Alternative Performance Measures ('APMs') used by the Board to monitor underlying performance at a Group and operating segment level, which are applied consistently throughout. These APMs should be considered in addition to, and not as a substitute for or as superior to statutory measures. For more information on Genus's APMs, see the Glossary.

The effect of exchange rate movements on the translation of our overseas profits was to reduce the Group's adjusted profit before tax for the year by £3.4m compared with 2019, primarily from weakness in Latin American currencies. All growth rates quoted are in constant currency unless otherwise stated. Constant currency percentage movements are calculated by restating the results for the year ended 30 June 2020 at the average exchange rates applied to adjusted operating profit for the year ended 30 June 2019.

Revenue

Revenue increased by 13% in both constant and actual currencies to £551.4m (2019: £488.5m). PIC achieved strong revenue growth of 17% in constant currency (up 18% in actual currency), underpinned by high breeding stock sales and royalties in China as customers replenished ASF impacted herds. Our strategically important royalty revenue was up 11%, with growth in all regions. In ABS, revenue was up 9% in constant currency (7% in actual currency), with growth in all regions. Sexed product revenue growth of 35% was ahead of our expectations due to continued strong uptake of Sexcel, our high-fertility sexed genetics product.

Adjusted Operating Profit Including JVs

	Actual currency			Constant currency
Year ended 30 June	**2020**	**2019**	**Change**	**change**
Adjusted Profit Before Tax[1]	**£m**	**£m**	**%**	**%**
Genus PIC	**124.3**	100.6	24	25
Genus ABS	**32.5**	29.9	9	12
R&D	**(65.2)**	(54.7)	(19)	(17)
Central costs	**(15.6)**	(10.9)	(43)	(41)
Adjusted operating profit inc JVs	**76.0**	64.9	17	22
Net finance costs	**(5.0)**	(3.9)	(28)	(28)
Adjusted profit before tax	**71.0**	61.0	16	22

[1] Includes share of adjusted pre-tax profits of joint ventures and removes share of adjusted profits of non-controlling interests.

Adjusted operating profit including joint ventures was £76.0m (2019: £64.9m), reflecting a high growth rate of 22% in constant currency as mentioned above. Within this, Genus's share of adjusted joint venture operating profits was higher at £11.3m (2019: £7.6m), primarily due to strong results in the PIC Agroceres JV in Brazil and our JV in China. Amounts attributable to non-controlling interests remained broadly consistent at £0.6m (2019: £0.4m). Our gene editing investment, which is primarily focused on creating resistance in pigs against the devastating PRRSv disease, increased £1.1m as planned to £8.4m, however the net investment reported is £5.2m (2019: £7.3m) as it includes recognition of net income of £3.2m in relation to the first milestone payment received from our BCA collaboration in China. Excluding our gene editing investment, adjusted operating profit including joint ventures increased by 17% in constant currency to £81.2m (2019: £72.2m), which exceeded our medium-term objective to achieve growth of 10%.

PIC performed very strongly with adjusted operating profit including joint ventures up 25% in constant currency, benefitting from strong demand in China, despite volatile conditions for our customers in some markets, most notably the US. Volumes were up 13% (6% excluding China) with all regions contributing. Brazil had particularly strong growth, whilst Russia has now grown to become our largest European market.

ABS also had a strong year with adjusted operating profit increasing 12%, and volume growth of 8%. Sexcel continued to demonstrate that it is the sexed product of choice for progressive dairy farmers, driving overall sexed volume growth of 47%. Despite the challenging market conditions brought by the COVID-19 pandemic, strong adjusted operating profit growth was achieved in all regions except Europe. Latin America benefitted from innovative digital sales campaigns and in Asia growth was notable in India where our IntelliGen third party production facilities are performing strongly.

Central costs increased by 41% in constant currency reflecting recruitment costs associated with key board and leadership positions, a fall in the value of a listed investment, and increased bonuses following the strong financial performance in the year ended 30 June 2020. The majority of the increase in central costs is not expected to recur annually.

Statutory Profit Before Tax

The table below reconciles adjusted profit before tax to statutory profit before tax:

	2020 £m	2019 £m
Adjusted Profit Before Tax	**71.0**	61.0
Operating profit attributable to non-controlling interest	**0.6**	0.4
Net IAS 41 valuation movement on biological assets in JVs and associates	**(0.1)**	(1.1)
Tax on JVs and associates	**(2.3)**	(1.4)
Adjusting items:		
Net IAS 41 valuation movement on biological assets	**15.8**	(14.7)
Amortisation of acquired intangible assets	**(8.5)**	(9.5)
Share-based payment expense	**(5.8)**	(3.0)
Exceptional items	**(19.2)**	(21.8)
Statutory Profit Before Tax	**51.5**	9.9

Our statutory profit before tax was £51.5m (2019: £9.9m), reflecting the increase in the underlying trading performance and the uplift in the non-cash fair value net IAS 41 biological asset movement. Within this, there was a £13.2m uplift (2019: £1.9m reduction) in porcine biological assets and a £2.6m uplift (2019: £12.8m reduction) in bovine biological assets, due to certain fair value model estimate changes. Share-based payment expense was £5.8m (2019: £3.0m). These reconciling items tend to be non-cash, can be volatile and do not correlate to the underlying trading performance in the period.

Exceptional Items

There was a £19.2m net exceptional expense in the year (2019: £21.8m expense), which included a charge of £16.4m (2019: £5.0m) reflecting legal fees of £5.6m (2019: £5.0m) and £10.8m for damages and costs in relation to Genus ABS's litigation with STGenetics ('ST'). A provision of £10.5m has been recognised in the year ended 30 June 2020 in respect of these damages, see note 3 to the condensed financial statements for more details. Also included are charges of £2.1m (2019: £0.7m) in relation to acquisition activities and other items which include £0.8m of fees relating to our strategic porcine collaboration in China with BCA and an insurance receipt from a legacy environmental claim. In the prior year the majority of the exceptional expense was a net charge of £15.2m in respect of legacy pension schemes related to GMP equalisation.

Net Finance Costs

Net finance costs of £5.0m (2019: £3.9m), included £2.9m (2019: £3.3m) of interest payable on bank loans and overdrafts. This was favourable to the prior year due to lower average borrowing levels as the share placement in the previous year took place mid-way through that year. Interest rates were broadly comparable at 2.56% (2019: 2.50%). Pension interest was also lower in the year at £0.4m (2019: £0.9m) due to the decreased pension deficit at 30 June 2019.

These gains were outweighed by £1.0m of interest payable on leases mainly as a result of the impact of IFRS 16 adoption and £0.5m in relation to the discounting on the Group's put options over the equity of De Novo and PIC Italia, which were originally recognised as financial liabilities on a present value basis.

Taxation

The tax charge on adjusted profits for the period is £15.6m (2019: £14.8m), which represents an adjusted effective tax rate of 22.0% (2019: 24.3%). The decrease in the rate from prior year reflects a greater weighting of profit from China benefiting from an effective tax rate ('ETR') of 11.7%, which reduced the Group ETR from prior year by c3%. The adjusted effective tax rate of 22.0% is greater than the underlying UK tax rate of 19% mainly due to the application of higher overseas tax rates which uplifts the Group tax rate by 2.9%, net of the benefit from operations in China and also due to higher withholding taxes incurred when dividends are remitted between group companies and higher provision of deferred tax on undistributed earnings. The current year adjusted tax rate also benefits by 1.7% from changes in tax rates during the period reflected in the revaluation of the UK deferred tax assets. The outlook for the Group ETR is in the range of 23%-24% consistent with the current year excluding this one-off change of rate benefit.

The tax charge for the period of £12.9m on the statutory profit (2019: £4.6m) represents an effective tax rate of 24.0% (2019: 40.7%). The high statutory tax charge in the previous period was a consequence of the exceptional UK pension expense relating to Guaranteed Minimum Pension equalisation and the IAS 41 fair value expense which reduced statutory profit in the prior period by c£30m, increasing the effective charge for fixed items such as withholding tax expenses as a percentage (12%) of the remaining profit.

Earnings Per Share

Adjusted basic earnings per share increased by 17% (23% in constant currency) to 85.4 pence (2019: 73.2 pence) as a result of the strong trading performance and lower tax rate. Basic earnings per share on a statutory basis were 62.4 pence (2019: 12.4 pence), reflecting the strong trading performance and an uplift in the non-cash fair value net IAS 41 biological asset movement.

Biological Assets

A feature of the Group's net assets is its substantial investment in biological assets, which under IAS 41 are stated at fair value. At 30 June 2020 the carrying value of biological assets was £370.2m (2019: £346.2m restated), as set out in the table below:

	2020 £m	**(restated) 2019 £m**
Non-current assets	**310.1**	287.1
Current assets	**39.8**	40.1
Inventory	**20.3**	19.0
	370.2	346.2
Represented by:		
Porcine	**242.7**	228.5
Dairy and beef	**127.5**	117.7
	370.2	346.2

The balance sheet comparatives for the years ended 30 June 2019 and 30 June 2018 have been restated by £20.5m with no effect on the Group Income Statement or the Group Statement of Cash Flows. Further information is provided in note 1 to the condensed financial statements.

The movement in the overall balance sheet carrying value of biological assets of £24.0m includes the effect of exchange rate translation increases of £5.4m. Excluding the translation effect there was:

- a £9.3m increase in the carrying value of porcine biological assets, due principally to an increase in the pure-line valuation (driven by an increase in the percentage of animals going for breeding sales and a reduction in the Pure line risk adjusted discount rate); and
- a £9.3m increase in the bovine biological assets carrying value, primarily due to current estimates of projected sales volumes.

The historical cost of these assets, less depreciation, was £57.5m at 30 June 2020 (2019: £58.2m), which is the basis used for the adjusted results. The historical cost depreciation of these assets included in adjusted results was £11.0m (2019: £9.4m).

Retirement Benefit Obligations

The Group's retirement benefit obligations at 30 June 2020 were £18.1m (2019: £24.2m) before tax and £14.6m (2019: £19.8m) net of related deferred tax. The largest element of this liability relates to the multi-employer Milk Pension Fund, which we account for on the basis of Genus being responsible for 86% of the scheme (2019: 86%).

During the year, contributions payable in respect of the Group's defined benefit schemes amounted to £8.4m (2019: £7.6m).

Despite the impact of COVID-19 on asset valuations and lower bond yields during the year, robust investment strategies for our two main defined benefit obligation schemes have limited the current financial impact. Both the Dalgety Pension Fund ('DPF') and our share of the Milk Pension Fund ('MPF') reported IAS 19 surpluses, prior to any IFRIC 14 amendments.

Cash Flow

Cash generated by operations of £82.9m (2019: £48.4m) represented cash conversion of 127% (2019: 84%) of adjusted operating profit excluding joint ventures, or 115% excluding the impact of adopting IFRS 16. The strong conversion of adjusted operating profit to cash is aligned to our medium-term objective to achieve conversion of at least 90%. The increase was primarily due to the strong trading performance and a continued focus on working capital management.

Capital expenditure cash flows of £35.4m (2019: £28.3m) included higher IntelliGen capital expenditure for the new production locations in Wisconsin as well as investment in state-of-the-art new bull housing and in Genus One, a single global enterprise system, where the rollout is progressing well. Cash inflows from joint ventures were higher at £3.7m (2019: £3.4m). After interest and tax paid, total free cash flow was £35.2m (2019: £10.0m).

The cash outflow from investments was £0.1m (2019: £22.7m), with deferred consideration payments being offset by net return of capital from one of our Chinese joint ventures (Xianyang Yongxiang Agriculture Technology Co. Ltd).

The net cash inflow after investments and dividends was £16.9m (2019: £37.0m) with the prior year benefiting from a 5% equity placement of 3.1m shares which raised proceeds of £66.5m net of fees to provide flexibility to pursue future growth opportunities.

	2020	**2019**
Cash flow (before debt repayments)	**£m**	**£m**
Cash generated by operations	82.9	48.4
Interest and tax paid	(17.1)	(15.0)
Capital expenditure	(35.4)	(28.3)
Cash received from JVs	3.7	3.4
Other	1.1	1.5
Free cash flow	**35.2**	**10.0**
Acquisitions and investments	(0.1)	(22.7)
Dividends	(18.3)	(16.8)
Share placement	0.1	66.5
Net cash flow (before debt repayments)	**16.9**	**37.0**

Net Debt and new Credit Facility

Net debt increased to £102.6m at 30 June 2020 (2019: £79.6m), primarily due to the £24.7m impact of adopting IFRS 16.

At the end of June 2020 there was substantial headroom of £125.4m under the Group's credit facilities of £228m. Of the Group's facilities as at 30 June 2020, £47m was due to expire in February 2021, with the remainder expiring in February 2022.

A new and enlarged credit facility agreement with a syndicate of eight banks was signed post year end on 24 August 2020. The new facility consists of a £150m multi-currency RCF, a USD125m RCF and a USD20m bond and guarantee facility. The term of the new facility is for three years with an option to extend the maturity date before the first and second anniversaries of the signing date for a further year. The facility also includes an uncommitted £100m accordion option which can be requested on a maximum of three occasions over the lifetime of the facility to fund the Group's business development plans.

The Group's financial position and borrowing ratios remain very strong, with sufficient cash flows available to fund internal investments and debt finance available to pursue external acquisition opportunities. At the end of June 2020 interest cover was at 32 times (2019: 34 times). EBITDA, as calculated under our financing facilities includes cash received from joint ventures and historical cost depreciation of biological assets. The ratio of net debt to EBITDA on this basis improved to 0.9 times (2019: 1.0 times) with both lower net debt on a frozen GAAP basis and an increased EBITDA. This level of leverage is just below our medium-term objective of having a ratio of net debt to EBITDA of between 1.0 – 2.0 times.

The Group has adopted the IFRS 16 'Leases' standard from 1 July 2019 using the modified retrospective approach and has recognised the cumulative effect of applying IFRS 16 at the 1 July 2019 transitional date and the prior period will not be restated.

The impact on the opening balance sheet as at 1 July 2019 was to recognise a right of use asset and corresponding lease liability of £26.6m. Profit before tax has not changed materially, however operating profit in FY20 has increased by £0.7m (due to the depreciation expense being lower than the operating lease expense it replaces) offset by increased finance charges on the higher liability. IFRS 16 also requires a reclassification of cash outflow from operations of £7.6m to net cash used in financing activities, however the overall impact to the Group is cash flow neutral.

Return on Adjusted Invested Capital

We measure the Group's return on adjusted invested capital on the basis of adjusted operating profit including joint ventures after tax, divided by the operating net assets of the business, stated on the basis of historical cost, excluding net debt and pension liability. This removes the impact of IAS 41 fair value accounting, the related deferred tax and goodwill. The return on adjusted invested capital was higher at 21.0% after tax (2019: 18.9%), reflecting the strong profit growth and lower tax rate, partially offset by an increased asset base from the right of use asset adjustment under IFRS 16 mentioned above. Excluding the impact of IFRS 16 adoption the return on adjusted invested capital would have been 22.8%.

Dividend

The Board has recommended a final dividend of 19.7 pence per ordinary share, an increase of 5% over the prior year final dividend. When combined with the interim dividend increase of 6%, this will result in a total dividend for the year of 29.1 pence per ordinary share, an increase of 5% for the year. Dividend cover from adjusted earnings remains strong at 2.9 times (2019: 2.6 times) and is in line with our Board's intention to maintain a progressive dividend within a target adjusted earnings cover range of 2.5 – 3.0 times.

It is proposed that the final dividend will be paid on 11 December 2020 to the shareholders on the register at the close of business on 20 November 2020.

Alison Henriksen

Chief Financial Officer

7 September 2020

Genus PIC – Operating Review

Year ended 30 June	Actual currency 2020	2019	Change	Constant currency change
	£m	**£m**	**%**	**%**
Revenue	**298.8**	253.7	18	17
Adjusted operating profit exc JV	**113.3**	93.1	22	21
Adjusted operating profit inc JV	**124.3**	100.6	24	25
Adjusted operating margin exc JV	**37.9%**	36.7%	1.2pts	1.2pts

Market

Throughout FY20 ASF caused volatility and fundamental shifts in global supply and demand for pork and porcine genetics. The occurrence of the COVID-19 pandemic in the second half of the year also significantly disrupted the supply chain dynamics for pork producers, most notably in the US.

In Asia, ASF continued to spread. China had previously housed around half the world's sow herd but ASF reduced China's sow herd by more than 50%, causing a pork supply gap of 17-23 million tons in Asia. In response, China increased pork imports from all major exporting regions and is expected to account for 40% of global imports in 2020 (source: USDA). Local pig and pork prices have risen strongly, with Chinese pig prices more than 3.5 times US prices in May 2020. High prices and government policies incentivized Chinese producers to expand production and re-stock farms. Despite this, Chinese pork production is expected to decline 15-20% in 2020. In Vietnam, the spread of ASF has largely stabilised but pork production is around 19% lower than the prior year. In the Philippines, pork production is estimated to be 9% lower, with ASF spreading within backyard farms.

Increased Chinese demand and US-China trade disputes had made US pork markets volatile before the onset of COVID-19. US meat processing plants emerged as COVID-19 hotspots, with shutdowns sharply reducing pork production. With more pigs than slaughter capacity, US pig prices fell steeply. US producers' responses included sow herd reductions. Although US pork exports have been very strong, with Q1 2020 up 40% versus the prior year, driven by China, political tensions with China over the origin of COVID-19, coupled with a sluggish food-service recovery and higher retail pricing, have depressed overall pork demand and producer margins in Q2. In July 2020 there were 5.8% more market pigs in the US than in the previous year due to the backlog from processing plants not operating at capacity, which suggests that trading conditions for pig farmers will be challenging for at least the remainder of 2020.

In Latin America, Brazil had benefitted from increased exports to China before COVID-19 occurred. In Q2 2020, Brazil saw a high increase of COVID-19 cases and experienced similar meat processing difficulties as the US. However, export demand remains robust, with pork production forecast to increase 4% in 2020 versus 2019.

Europe was an early beneficiary of Chinese demand following ASF, with EU pork exports expected to rise nearly 10% in 2020. However, slaughter plants became COVID-19 hotspots in Q2 2020, leading to higher volatility in the market. ASF is an additional risk and it has been reported in Poland, 10km from the German border. Germany is a top European producer and exporter and if ASF spreads in Germany this could affect neighbouring countries in the instance that exports might be prohibited.

China has seen strong demand for breeding stock as producers repopulate. Many producers have used slaughter pigs to restock, thereby reducing their productivity. This will create a longer term demand for elite genetics. COVID-19 has not led to a major reduction in demand for porcine genetics, but if sow herds in the Americas or Europe do decline this will impact breeding stock demand and royalties.

Performance

Genus PIC delivered very strong results, despite volatile market conditions for its customers in certain markets. Adjusted operating profits including joint ventures were £124.3m, up 25% in constant currency. Volumes were up 13%, with all regions contributing. Revenue was 17% higher in constant currency, primarily due to stronger breeding stock sales and royalty revenue.

In North America, adjusted operating profits were flat for the year in constant currency, after recording 5% growth in the first half. The closure of some processing plants during the second half, in response to COVID-19 outbreaks, resulted in a backlog of pigs awaiting slaughter and a moderate reduction in customer investment in breeding herds. Second half adjusted operating profits were also affected by customer credits in relation to an historical issue arising from a few contract farm locations. Royalty revenue saw modest growth during the year of 1% and sireline market share also grew, underpinned by the introduction of the Duroc PIC800, which is demonstrating strong results in customer systems. New damline customer wins in the year will lead to further market share growth in future periods.

Latin American adjusted operating profits improved by 23% in constant currency, with double digit growth in nearly all countries. Growth was particularly strong in Brazil during the period, as a result of market share gains assisted by strong industry exports to China. Royalty revenues and volumes across the region were up 9%.

Adjusted operating profit in Europe was up by 27% and revenues rose by 29% in constant currency. Strong market prices helped fund customer breeding projects and the business has continued to benefit from its proven strategy to focus on key customers and expand royalty sales. The highest growth in the period was in Russia, Spain and Germany, with Russia having now grown into PIC Europe's largest market, led by high share in large key accounts. PIC's partnerships with Hermitage Genetics and Møllevang continue to add significant value to PIC's global business.

Asia's performance improved significantly by 225% in constant currency over the prior year, primarily due to a sharp increase in customer breeding projects in China, with positive conditions in that country as described in the market section above. In addition, royalty revenue grew strongly in China (up 168%) and accounted for 25% of volume there. PIC China substantially increased multiplication capacity during the year and also expanded its supply chain through its joint venture relationship with New Hope, and a new joint venture initiated with Shanxi Xin Daxiang Animal Husbandry Co., Ltd. These investments will aid further growth in the future. Adjusted operating profits in franchises across Asia were up by 43% in constant currency. However, these growth areas were partially offset by an adjusted operating profit decline of 76% in the Philippines, due to the outbreak of ASF in 1H and the impact of COVID-19 in 2H. The swine industry in many parts of the Philippines remains unstable.

Overall, PIC's long-term global strategy of ongoing investments in product supply and differentiation is generating significant competitive advantages, enabling Genus PIC to better serve customers, mitigate global market risks and support future growth.

Genus ABS - Operating Review

Year ended 30 June	Actual currency 2020	2019	Change	Constant currency change
	£m	£m	%	%
Revenue	**237.6**	222.6	7	9
Adjusted operating profit	**32.5**	29.9	9	12
Adjusted operating margin	**13.7%**	13.4%	0.3pts	0.4pts

Market

Both dairy and beef markets have been affected by government lockdowns around the world, to manage the COVID-19 pandemic. In Europe, dairy prices dropped throughout March and April 2020, although they have started to show signs of recovery as foodservice channels reopen. In North America dairy prices also saw significant volatility, as they fell to around 40% below the July 2019 peak by May 2020, before recovering sharply in June. Global volatility is expected to continue as countries and their economies continue to react to the aftermath of COVID-19 impacts.

Milk production in the U.S., Europe and Australia was slightly above prior year levels in the first quarter of 2020, with output across the seasonal period in New Zealand consistent with the prior year. Output was down moderately in Brazil, as currency fluctuations compressed producer margins.

Despite global economic challenges, the Chinese Government has encouraged all Chinese citizens to consume 300g of dairy products per day, more than triple the current average consumption. However, the country's high inventories of whole milk powder will likely lead to a decline in imports in the immediate future. In India, the unregulated dairy sector was significantly affected by COVID-19, forcing further consolidation. Growth in liquid milk has supported the expansion of packaged dairy products in the regulated sector.

In the U.S., beef processing facilities capacity were affected by COVID-19 shut-downs, increasing prices for beef being processed, but reducing cattle prices. Australian beef production saw an overall reduction in supply, leading to fewer exports and prices that were stable and then rose moderately through Q2 of 2020. Lower beef production in Brazil was mirrored by lower demand.

In Europe, beef prices have fallen moderately since the onset of the global pandemic, underpinned by disruption in trade from export markets such as Ireland and Poland. By the end of June 2020, these prices had largely recovered in line with the prior year as demand of food service and retail normalised.

Consolidation within the bovine genetics segment was less prevalent than in the prior year but an increasing number of partnerships have been developing between dairy genetic companies as growing and progressive profit-focused customers demand access to elite dairy, beef and sexed semen.

Performance

ABS adjusted operating profits increased by 12%, with volumes up 8% and revenues up 9% in constant currency, as customers continued the shift from conventional to sexed and beef genetics. Sexed volumes grew by 47%, reflecting Sexcel's continued success. Increased use of beef genetics in dairy herds supported 17% growth in global beef volumes. Globally, COVID-19 has created dynamic and challenging market conditions for our customers but overall demand for ABS product has been resilient. This has been aided by the salesforce focus on obtaining 100% of customers' business and the introduction of new partnership based contract structures.

In North America, revenue grew by 10% and adjusted operating profit increased by 12% in constant currency. Previous strategic investments to strengthen key account management gained traction, with new customer wins. Volumes were up by 7%, gaining market share, and sexed volumes were up 42% as the high growth of Sexcel continued. Beef volumes rose 20%, supported by proprietary NuEra genetics selected for cross-bred beef-on-dairy performance. Embryo volumes increased slightly, as a new dedicated IVB laboratory for a key customer account became fully operational.

Europe achieved volume growth of 8% and revenue growth of 2%, with adjusted operating profit flat against prior year in constant currency. Business conditions in Italy and France were particularly challenging, as COVID-19 lockdowns reduced salesforce mobility and customer access. Sexed semen volumes grew 42%, with the UK, Ireland and the European distributor business seeing the strongest growth. The trend of dairy customers using sexed genetics, coupled with beef genetics for a portion of the herd, led to beef volumes increasing by 10%.

In Latin America, revenues grew by 20% and adjusted operating profit increased by 35% in constant currency, with Brazil and Argentina particularly strong. In a challenging environment from COVID-19, Brazil achieved good success through innovative digital sales campaigns whilst robust pricing policies and cash collection in Argentina helped to mitigate the impacts of inflation and currency devaluation. Volumes in Latin America overall increased by 12%, as customers embraced digital technologies to engage and transact with ABS' sales team. Sexed volumes increased by 24% and beef volumes by 18%, utilising NuEra genetics, selected for cross-bred performance of North American sires with tropical cows.

In Asia, adjusted operating profit was up 59% and volumes by 5%, with trading activity increasing in China following a period of vertical integration among customers, as dairy processors acquired farms. Sexed volumes were up 98%, with India achieving record results up 133% after a new IntelliGen production facility for the State of Uttar Pradesh started operation, more than offsetting disruption early in the year caused by flooding of the Genus India Brahma facility.

Overall, the increasing customer adoption of Sexcel, along with our leading dairy genetics portfolio and our NuEra proprietary beef offering, mean we anticipate continued positive progress into next year.

Research and Development - Operating Review

Year ended 30 June	Actual currency			Constant currency change
	2020	2019	Change	
	£m	£m	%	%
Porcine product development	**28.9**	18.4	57	55
Bovine product development	**20.9**	20.0	4	2
Gene editing	**5.2**	7.3	(29)	(30)
Other research and development	**10.2**	9.0	13	10
Net expenditure in R&D[4]	**65.2**	54.7	19	17

Performance

Net research and development investment increased by 17% in constant currency, as Genus pursued key strategic initiatives to further strengthen its proprietary differentiated offerings. The Group will continue to increase its investment in the following areas: gene editing, primarily under the PRRSv programme; genome science and specifically scientific data capabilities; biosystems engineering; and reproductive biology, where new initiatives are being taken.

Porcine product development expenditure increased by 55%, as a result of the incremental costs of growing our elite nucleus farm network, costs to address a disease outbreak in a Canada farm and the substantial deterioration of the North American lean hog market, which impacted by-product margins compared to the prior year. The underlying growth was 32% excluding costs of £4.4m of a non-repetitive nature. We continue to deliver historically high rates of genetic improvement, as we focus on improving technical processes for genomic evaluation, crossbred performance testing and expanded elite nucleus populations. The integration of germplasm from the Møllevang acquisition continued as planned and the expansion of our nucleus farm network has improved access to elite animals across our global customer base.

Bovine product development expenditure increased by 2%, as Genus continues to produce an industry leading Holstein dairy bull portfolio, driving strong volume growth in ABS. The De Novo joint venture is producing more than 50% of these animals and the strong pipeline of young bulls and pregnancies will help sustain our leadership position. Beef product development further strengthened our portfolio of proprietary NuEra genetics, by enhancing genomic evaluation and increasing testing and validation to demonstrate differentiated value to customers. The initial results of commercial full cycle trials of NuEra genetics are encouraging. The NuEra Genetics programme produced more than 20% of the total global beef units sold. During the period we continued to invest in IntelliGen technology and expanded our Sexcel production manufacturing capacity to meet increasing demand and to provide differentiated genetic offerings globally. We also successfully brought into production our second external customer site in India and further expanded the global IntelliGen footprint, through technology licensing with customers and external customer service. IntelliGen production sites around the world, both Genus's and customer owned, now total eight, compared with six in the prior year.

Net gene editing expenditure decreased by 30% in the period, mainly due to net income of £3.2m recognised for a milestone payment received from our Chinese partner, BCA. Excluding BCA income, gene editing expenditures grew by 14% due to investment in the PRRSv resistance project. We internalised our capability for producing gene edited animals, to increase efficiency and timeliness for both the PRRSv resistance programme and other potential future projects. We have been working well with the FDA and completed the first submission in the approval process, and initiated conversations on regulatory and market acceptance in other key global markets. Active communication and planning with BCA has meant we have made progress in the initial steps of working together in China.

Other research and development expenditure remained in line with the prior year. This included work on our bioinformatics platform, genome science, external collaborations and intellectual property protection in a variety of discovery areas. We are planning to increase our investment in discovery areas as well as gene editing as we move closer towards commercialisation.

[4] Excluding profit attributable to non-controlling interest

Principal risks and uncertainties

Genus is exposed to a wide range of risks and uncertainties as it fulfils its purpose of providing farmers with superior genetics to fulfil its vision. Some of these risks relate to the current business operations in our global agricultural markets, while others relate to future commercial exploitation of our leading-edge R&D programmes. We are also exposed to global economic and political risks such as trade restrictions and Brexit. Our assessment is that Brexit is not a principal risk for Genus. Additionally, we also monitor emerging new risks such as changing consumption patterns, environmental sustainability and the emergence of alternative proteins such as lab-based meat.

In considering our risks, we performed a detailed assessment of the impact of the global outbreak of COVID-19 during the second half of our financial year. The assessment covered COVID-19 impact on our people, our customers and our supply chain. We also assessed the short and long term risks associated with the expected global economic disruption affecting our industry and the markets where we operate.

Out of this broad risk universe we have identified ten principal risks, which we periodically evaluate based on an assessment of the likelihood of occurrence and magnitude of potential impact, together with the effectiveness of our risk mitigation controls. The table below outlines these principal risks and uncertainties and how we manage them.

The Directors confirm that they have undertaken a robust assessment of the principal risks and uncertainties facing the Group.

Risk	**Risk description**	**How we manage risk**	**Risk change in 2020**
Strategic Risks			
DEVELOPING PRODUCTS WITH COMPETITIVE ADVANTAGE	• Development programmes fail to produce best genetics for customers. • Increased competition to secure elite genetics.	Dedicated teams align our product development to customer requirements. We use large-scale data and advanced genomic analysis to ensure we meet our breeding goals. We frequently measure our performance against competitors in customers' systems, to ensure the value added by our genetics remains competitive.	No change.
CONTINUING TO SUCCESSFULLY DEVELOP INTELLIGEN TECHNOLOGY	• Failure to manage the technical, production and financial risks associated with the rapid development of the IntelliGen business.	Our continued development of the technology and its deployment to new markets is supported by dedicated internal resources and agreements with suppliers. Further patent infringement proceedings initiated by ST in the US are being vigorously defended.	No change. We continue to see strong demand for Sexcel and continue to implement improvements and innovation into our technology, improving fertility outcomes and processing efficiency. We continue to increase IntelliGen's global deployment, securing new third-party customers. We continue to experience patent infringement filings as well as seeing the progression of existing filings during the year (see note 3).
DEVELOPING AND COMMERCIALISING GENE EDITING AND OTHER NEW TECHNOLOGIES	• Failure to develop successfully and commercialise gene-editing technologies due to technical, intellectual	We stay aware of new technology opportunities through a wide network of academic and industry contacts. Our Genus Portfolio Steering Committee ('GPSC')	No change. Key initiatives continue to progress through the R&D life cycle and we maintain the high

	• property ('IP'), market, regulatory or financial barriers. • Competitors secure 'game-changing' new technology.	oversees our own research, ensures we correctly prioritise our R&D investments and assesses the adequacy of resources and the relevant IP landscapes. We have formal collaboration agreements with key partners, to ensure responsible exploration and development of technologies and the protection of IP. The Board is updated regularly on key development projects.	level of investment needed to bring the end products to market.
CAPTURING VALUE THROUGH ACQUISITIONS	• Failure to identify appropriate investment opportunities or to perform sound due diligence. • Failure to successfully integrate an acquired business.	We have a rigorous acquisition analysis and due diligence process, with the Board reviewing and signing off all material projects. We also have a structured post-acquisition integration planning and execution process.	No change. We continue to work diligently to identify areas of opportunity consistent with our strategic plans and our aim to accelerate growth and create value for our shareholders. Our experiences with post-acquisition integration provide a platform for integrating newly acquired businesses.
GROWING IN EMERGING MARKETS	• Failure to appropriately develop our business in China and other emerging markets.	Our organisation, blends local and expatriate executives, supported by the global species teams, to allow us to grow our business in key markets, while managing risks and ensuring we comply with our global standards. We also establish local partnerships where appropriate to increase market access.	No change.
Operational Risks			
PROTECTING IP	• Failure to protect our IP could mean Genus-developed genetic material, methods, systems and technology become freely available to third parties.	We have a global, cross-functional process to identify and protect our IP. Our customer contracts and our selection of multipliers and joint venture partners include appropriate measures to protect our IP. We maintain IP landscape watches and where necessary conduct robust 'freedom to operate' searches, to identify third-party rights to technology.	No change.
ENSURING BIOSECURITY AND CONTINUITY OF SUPPLY	• Loss of key livestock, owing to disease outbreak. • Loss of ability to move animals or semen freely (including across borders) due to disease outbreak, environmental incident or international trade sanctions and disputes.	We have stringent biosecurity standards, with independent reviews throughout the year to ensure compliance. We investigate biosecurity incidents, to ensure learning across the organisation. We regularly review the geographical diversity of our	Increased. This is due to the global supply chain challenges imposed by the COVID-19 outbreak as well as the rising geo-political tension and escalation of trade wars. Our geographically diverse production facilities and the expert

	• Lower demand for our products, due to industry-wide disease outbreaks.	production facilities, to avoid over-reliance on single sites.	knowledge of our supply chain and commercial teams allowed for a swift and comprehensive response to these challenges, which helped to reduce their impact.
HIRING AND RETAINING TALENTED PEOPLE	• Failure to attract, recruit, develop and retain the global talent needed to deliver our growth plans and R&D programmes.	We have a robust talent and succession planning process, including annual assessments of our global talent pool and active leadership development programmes. The Group's reward and remuneration policies are reviewed regularly, to ensure their competitiveness. We work closely with a number of specialist recruitment agencies, to identify candidates with the skills we need.	Reduced. The Group's Finance Director took the role of the Chief Executive in September 2019 and we appointed our new Chief Financial Officer in January 2020. To date, we have been largely successful in recruiting and retaining the appropriate skills at all levels to meet our business growth plans.
Financial Risks			
MANAGING AGRICULTURAL MARKET AND COMMODITY PRICES VOLATILITY	• Fluctuations in agricultural markets affect customer profitability and therefore demand for our products and services. • Increase in our operating costs, due to commodity pricing volatility. • The COVID-19 outbreak in 2019 increased volatility and introduced significant new financial and operational pressure across agricultural markets.	We continuously monitor markets and seek to balance our costs and resources in response to market demand. We actively monitor and update our hedging strategy to manage our exposure. Our porcine royalty model and extensive use of third-party multipliers mitigates the impact of cyclical price and/or cost changes in pig production.	Increased. The full impact of the COVID-19 outbreak on our customers and the global economy remains to be seen. We have implemented additional measures to strengthen our monitoring processes and continue to work very closely with our customers to enhance our response to both short and long term impact.
FUNDING PENSIONS	• Exposure to costs associated with failure of third-party members of joint and several liabilities pension scheme. • Exposure to costs because of external factors (such as GMP equalisation, RPI reform proposals, mortality rates, interest rates or investment values) affecting the size of the pension deficit.	We are the principal employer for the Milk Pension Fund ('MPF') and chair the group of participating employers. The fund is closed to future service and has an agreed deficit recovery plan, based on the 2018 actuarial valuation. We also monitor the strength of other employers in the fund and have retained external consultants to provide expert advice.	Increased. The Trustee formalised an investment de-risking strategy in line with the principles agreed in the memorandum of understanding signed with the employers' group in 2019. The COVID-19 outbreak impacted the financial markets and net adverse impact on funding levels of recent market movements c2.6% (£13m). Developments in RPI reform are being monitored closely to assess likely impacts but the actual shape of the reform is uncertain at this point.

Group Income Statement

Genus plc

For the year ended 30 June 2020

	Note	2020 £m	2019 £m
REVENUE	2	**551.4**	488.5
Adjusted Operating Profit	2	**65.3**	57.7
Adjusting items:			
- Net IAS 41 valuation movement on biological assets	10	**15.8**	(14.7)
- Amortisation of acquired intangible assets	9	**(8.5)**	(9.5)
- Share-based payment expense		**(5.8)**	(3.0)
		1.5	(27.2)
- Exceptional items:	3		
- Litigation		**(16.4)**	(5.0)
- Acquisition and integration		**(2.1)**	(0.7)
- Other		**(0.7)**	(0.9)
- Pension related		-	(15.2)
Total exceptional items		**(19.2)**	(21.8)
Total adjusting items		**(17.7)**	(49.0)
OPERATING PROFIT		**47.6**	8.7
Share of post-tax profit of joint ventures and associates retained		**8.9**	5.1
Finance costs	4	**(5.3)**	(4.7)
Finance income	4	**0.3**	0.8
PROFIT BEFORE TAX		**51.5**	9.9
Taxation	5	**(10.6)**	(3.2)
PROFIT FOR THE YEAR		**40.9**	6.7
ATTRIBUTABLE TO:			
Owners of the Company		**40.5**	7.8
Non-controlling interest		**0.4**	(1.1)
		40.9	6.7
EARNINGS PER SHARE			
Basic earnings per share	6	**62.4p**	12.4p
Diluted earnings per share	6	**61.9p**	11.9p
Alternative Performance Measures			
Adjusted operating profit		**65.3**	57.7
Adjusted operating profit attributable to non-controlling interest		**(0.6)**	(0.4)
Pre-tax share of profits from joint ventures and associates excluding net IAS 41 valuation movement		**11.3**	7.6
Gene editing costs		**5.2**	7.3
Adjusted operating profit including joint ventures and associates, excluding gene editing costs		**81.2**	72.2
Gene editing costs		**(5.2)**	(7.3)
Adjusted operating profit including joint ventures and associates		**76.0**	64.9
Net finance costs	4	**(5.0)**	(3.9)
ADJUSTED PROFIT BEFORE TAX		**71.0**	61.0
ADJUSTED EARNINGS PER SHARE			
Basic adjusted earnings per share	6	**85.4p**	73.2p
Diluted adjusted earnings per share	6	**84.7p**	70.7p

Adjusted results are the Alternative Performance Measures ('APMs') used by the Board to monitor underlying performance at a Group and operating segment level, which are applied consistently throughout. These APMs should be considered in addition to statutory measures, and not as a substitute for or superior to them. For more information on APMs, see Glossary.

Group Statement of Comprehensive Income

Genus plc

For the year ended 30 June 2020

	2020	**2020**	2019	2019
	£m	**£m**	£m	£m
PROFIT FOR THE YEAR		**40.9**		6.7
Items that may be reclassified subsequently to profit or loss				
Foreign exchange translation differences	**(4.9)**		19.7	
Fair value movement on net investment hedges	**(0.1)**		(1.6)	
Fair value movement on cash flow hedges	**(0.4)**		(2.2)	
Tax relating to components of other comprehensive income	**(1.4)**		(2.5)	
		(6.8)		13.4
Items that may not be reclassified subsequently to profit or loss				
Actuarial loss on retirement benefit obligations	**(16.6)**		(5.4)	
Movement on pension asset recognition restriction	**10.4**		(10.1)	
Release of additional pension liability	**4.7**		34.5	
Tax relating to components of other comprehensive expense/(income)	**0.8**		(3.2)	
		(0.7)		15.8
OTHER COMPREHENSIVE (EXPENSE)/INCOME FOR THE YEAR		**(7.5)**		29.2
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		**33.4**		35.9
ATTRIBUTABLE TO:				
Owners of the Company		**33.1**		37.1
Non-controlling interest		**0.3**		(1.2)
		33.4		35.9

Group Statement of Changes in Equity

Genus plc

For the year ended 30 June 2020

	Note	Called up share capital £m	Share premium account £m	Own shares £m	Trans-lation reserve £m	Hedging reserve £m	Retained earnings £m	Total £m	Non-controlling interest £m	Total equity £m
BALANCE AT 30 JUNE 2018 (as previously reported)		6.2	112.8	(0.1)	20.5	2.0	275.2	416.6	2.5	419.1
Prior period restatement		-	-	-	-	-	(15.2)	(15.2)	-	(15.2)
BALANCE AT 30 JUNE 2018 (restated)		6.2	112.8	(0.1)	20.5	2.0	260.0	401.4	2.5	403.9
Foreign exchange translation differences, net of tax		-	-	-	16.6	-	-	16.6	(0.1)	16.5
Fair value movement on net investment hedges, net of tax		-	-	-	(1.3)	-	-	(1.3)	-	(1.3)
Fair value movement on cash flow hedges, net of tax		-	-	-	-	(1.8)	-	(1.8)	-	(1.8)
Actuarial gain on retirement benefit obligations, net of tax		-	-	-	-	-	(4.6)	(4.6)	-	(4.6)
Movement on pension asset recognition restriction, net of tax		-	-	-	-	-	(8.3)	(8.3)	-	(8.3)
Recognition of additional pension liability, net of tax		-	-	-	-	-	28.7	28.7	-	28.7
Other comprehensive (expense)/income for the year		-	-	-	15.3	(1.8)	15.8	29.3	(0.1)	29.2
Profit for the year		-	-	-	-	-	7.8	7.8	(1.1)	6.7
Total comprehensive income for the year		-	-	-	15.3	(1.8)	23.6	37.1	(1.2)	35.9
Recognition of share-based payments, net of tax		-	-	-	-	-	0.2	0.2	-	0.2
Adjustment arising from change in non-controlling interest and written put option		-	-	-	-	-	-	-	(2.6)	(2.6)
Dividends	7	-	-	-	-	-	(16.8)	(16.8)	-	(16.8)
Issue of ordinary shares		0.3	66.2	-	-	-	-	66.5	-	66.5
BALANCE AT 30 JUNE 2019 (restated)		6.5	179.0	(0.1)	35.8	0.2	267.0	488.4	(1.3)	487.1
Foreign exchange translation differences, net of tax		-	-	-	**(6.4)**	-	-	**(6.4)**	**(0.1)**	**(6.5)**
Fair value movement on net investment hedges, net of tax		-	-	-	**0.1**	-	-	**0.1**	-	**0.1**
Fair value movement on cash flow hedges, net of tax		-	-	-	-	**(0.4)**	-	**(0.4)**	-	**(0.4)**
Actuarial loss on retirement benefit obligations, net of tax		-	-	-	-	-	**(10.4)**	**(10.4)**	-	**(10.4)**
Movement on pension asset recognition restriction, net of tax		-	-	-	-	-	**6.8**	**6.8**	-	**6.8**
Release of additional pension liability, net of tax		-	-	-	-	-	**2.9**	**2.9**	-	**2.9**
Other comprehensive expense for the year		-	-	-	**(6.3)**	**(0.4)**	**(0.7)**	**(7.4)**	**(0.1)**	**(7.5)**
Profit for the year		-	-	-	-	-	**40.5**	**40.5**	**0.4**	**40.9**
Total comprehensive income/(expense) for the year		-	-	-	**(6.3)**	**(0.4)**	**39.8**	**33.1**	**0.3**	**33.4**
Recognition of share-based payments, net of tax		-	-	-	-	-	**5.5**	**5.5**	-	**5.5**
Dividends	7	-	-	-	-	-	**(18.3)**	**(18.3)**	-	**(18.3)**
Issue of ordinary shares		-	**0.1**	-	-	-	-	**0.1**	-	**0.1**
BALANCE AT 30 JUNE 2020		**6.5**	**179.1**	**(0.1)**	**29.5**	**(0.2)**	**294.0**	**508.8**	**(1.0)**	**507.8**

Group Balance Sheet

Genus plc

As at 30 June 2020

	Note	2020 £m	*(restated) 2019 £m	*(restated) 2018 £m
ASSETS				
Goodwill	8	**105.6**	106.3	102.0
Other intangible assets	9	**76.2**	80.1	78.7
Biological assets	10	**310.1**	287.1	285.3
Property, plant and equipment	11	**117.9**	86.0	76.9
Interests in joint ventures and associates		**22.7**	23.6	19.9
Other investments		**6.9**	7.4	5.9
Derivative financial assets		**-**	0.4	0.3
Other receivables	12	**1.8**	-	-
Deferred tax assets		**3.7**	3.5	4.3
TOTAL NON-CURRENT ASSETS		**644.9**	594.4	573.3
Inventories		**37.4**	36.0	34.2
Biological assets	10	**39.8**	40.1	37.0
Trade and other receivables	12	**100.8**	98.0	91.0
Cash and cash equivalents		**41.3**	30.5	29.1
Income tax receivable		**3.1**	3.3	1.4
Derivative financial assets		**1.2**	1.1	2.5
Asset held for sale		**0.2**	0.2	0.2
TOTAL CURRENT ASSETS		**223.8**	209.2	195.4
TOTAL ASSETS		**868.7**	803.6	768.7
LIABILITIES				
Trade and other payables		**(95.0)**	(87.7)	(83.7)
Interest-bearing loans and borrowings		**(9.2)**	(2.1)	(13.4)
Provisions		**(4.0)**	(3.1)	(2.8)
Deferred consideration	16	**(7.5)**	(2.0)	(19.3)
Obligations under leases		**(10.0)**	(2.2)	(1.4)
Tax liabilities		**(4.0)**	(6.1)	(4.4)
Derivative financial liabilities		**(0.5)**	(1.0)	(0.3)
TOTAL CURRENT LIABILITIES		**(130.2)**	(104.2)	(125.3)
Trade and other payables		**(3.3)**	-	-
Interest-bearing loans and borrowings		**(103.6)**	(101.9)	(120.7)
Retirement benefit obligations	13	**(18.1)**	(24.2)	(33.9)
Provisions		**(11.8)**	(5.7)	(4.5)
Deferred consideration	16	**(1.2)**	(4.2)	(4.2)
Income tax liability		**-**	-	(0.9)
Deferred tax liabilities		**(65.5)**	(66.7)	(69.5)
Derivative financial liabilities		**(6.1)**	(5.7)	(3.7)
Obligations under leases		**(21.1)**	(3.9)	(2.1)
TOTAL NON-CURRENT LIABILITIES		**(230.7)**	(212.3)	(239.5)
TOTAL LIABILITIES		**(360.9)**	(316.5)	(364.8)
NET ASSETS		**507.8**	487.1	403.9

	Note	**2020**	*(restated) 2019	*(restated) 2018
		£m	£m	£m
EQUITY				
Called up share capital		**6.5**	6.5	6.2
Share premium account		**179.1**	179.0	112.8
Own shares		**(0.1)**	(0.1)	(0.1)
Translation reserve		**29.5**	35.8	20.5
Hedging reserve		**(0.2)**	0.2	2.0
Retained earnings		**294.0**	267.0	260.0
Equity attributable to owners of the Company		**508.8**	488.4	401.4
Non-controlling interest	17	**4.6**	4.2	5.7
Put option over non-controlling interest	17	**(5.6)**	(5.5)	(3.2)
Total non-controlling interest		**(1.0)**	(1.3)	2.5
TOTAL EQUITY		**507.8**	487.1	403.9

*see note 1 for details of the prior period restatement.

Group Statement of Cash Flows

Genus plc

For the year ended 30 June 2020

	Note	2020 £m	2019 £m
NET CASH FLOW FROM OPERATING ACTIVITIES	14	**65.8**	33.4
CASH FLOWS FROM INVESTING ACTIVITIES			
Dividends received from joint ventures and associates		**2.5**	2.7
Joint venture loan repayment		**1.2**	0.7
Disposal of joint venture		**3.8**	-
Acquisition of joint venture		**(2.2)**	-
Acquisition of trade and assets		**-**	(2.0)
Disposal of subsidiary		**-**	0.4
Payment of deferred consideration	16	**(1.7)**	(21.1)
Purchase of property, plant and equipment		**(24.6)**	(17.1)
Purchase of intangible assets		**(10.8)**	(11.2)
Proceeds from sale of property, plant and equipment		**1.1**	1.5
NET CASH OUTFLOW FROM INVESTING ACTIVITIES		**(30.7)**	(46.1)
CASH FLOWS FROM FINANCING ACTIVITIES			
Drawdown of borrowings		**80.0**	104.8
Repayment of borrowings		**(73.8)**	(138.9)
Payment of lease liabilities		**(11.1)**	(2.0)
Equity dividends paid		**(18.3)**	(16.8)
Issue of ordinary shares		**0.1**	66.5
NET CASH (OUTFLOW)/INFLOW FROM FINANCING ACTIVITIES		**(23.1)**	13.6
NET INCREASE IN CASH AND CASH EQUIVALENTS		**12.0**	0.9
Cash and cash equivalents at start of the year		**30.5**	29.1
Net increase in cash and cash equivalents		**12.0**	0.9
Effect of exchange rate fluctuations on cash and cash equivalents		**(1.2)**	0.5
TOTAL CASH AND CASH EQUIVALENTS AT 30 JUNE		**41.3**	30.5

1. REPORTING ENTITY

Status of audit

The condensed financial information given does not constitute the Group's financial statements for the year ended 30 June 2020 or the year ended 30 June 2019, but is derived from those financial statements. The financial statements for the year ended 30 June 2019 have been delivered to the Registrar of Companies and those for the year ended 30 June 2020 will be delivered following the Company's annual general meeting. The auditors have reported on those financial statements; their reports were unqualified, did not draw attention to any matters by way of emphasis without qualifying their reports, and did not contain statements under s. 498(2) or (3) Companies Act 2006.

Basis of preparation

The condensed financial information for the year ended 30 June 2020 together with the comparative year has been computed in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union.

The Group Financial Statements are presented in Sterling, which is the Company's functional and presentational currency. All financial information presented in Sterling has been rounded to the nearest million at one decimal point.

The principal exchange rates were as follows:

	Average			Closing		
	2020	2019	2018	**2020**	2019	2018
US Dollar/£	**1.26**	1.29	1.35	**1.24**	1.27	1.32
Euro/£	**1.14**	1.13	1.13	**1.10**	1.12	1.13
Brazilian Real/£	**5.74**	4.99	4.51	**6.77**	4.89	5.12
Mexican Peso/£	**26.08**	25.04	25.37	**28.52**	24.40	26.3
Chinese Yuan/£	**8.89**	8.83	8.77	**8.75**	8.72	8.75
Russian Rouble/£	**85.17**	84.93	79.66	**88.19**	80.30	82.94

While the condensed financial information included in this preliminary announcement has been computed in accordance with IFRSs, this announcement does not itself contain sufficient information to comply with IFRSs. The Company expects to publish full financial statements that comply with IFRSs in October 2020. These financial statements have also been prepared in accordance with the accounting policies set out in the 2019 Annual Report and Financial Statements, as amended by the following new accounting standards.

Restatement in the 2019 and 2018 balance sheet

During the period, it was discovered that an input used in the valuation of biological assets in preceding periods was not in line with operational data.

Accordingly, the prior period balance sheets at 30 June 2019 and 30 June 2018 have been restated in accordance with IAS 8, and, in accordance with IAS 1 (revised). A balance sheet at 30 June 2018 is also presented together with related notes. The restatements involved are a reduction in Biological assets at 30 June 2019 and 30 June 2018 of £20.5m and a reduction in related deferred tax liabilities at 30 June 2019 and 30 June 2018 of £5.3m.

Impact on the Group's balance sheet for year ended 30 June 2019

	(as reported) 2019 £m	Impact of restatement £m	**(restated) 2019 £m**
Non-current assets			
Biological assets	307.6	(20.5)	**287.1**
Current liabilities			
Deferred tax liabilities	(72.0)	5.3	**(66.7)**
Net assets	502.3	(15.2)	**487.1**

For the year ended 30 June 2019, there has been no material effect on the Group income statement, Group Statement of Comprehensive Income and no impact on the Group statement of cash flows. Therefore, there has been no restatement of the Group income statement and there is no adjustment to earnings per share.

New standards and interpretations

In the current period, the Group has applied a number of amendments to IFRSs issued by the International Accounting Standards Board that are mandatorily effective for an accounting period that begins after 1 January 2019 and have been implemented with effect from 1 July 2019. These are:-

- IFRIC 23 – 'Uncertainty over Income Tax Treatments';
- Annual Improvements to IFRS 2015-2017 Cycle;
- Amendments to IAS 28 – 'Long-term Interests in Associates and Joint Ventures';
- Amendments to IFRS 9 – 'Prepayment Features with Negative Compensation'; and
- Amendments to IAS 19 – 'Plan Amendment, Curtailment or Settlement';

Their addition has not had any material impact on the disclosures, or amounts reported in the Group Financial Statements.

In addition to the above the Group adopted IFRS 16 'Leases' from 1 July 2019.

IFRS 16 'Leases'

The Group has adopted IFRS 16 using the modified retrospective approach with the value of the right of use asset being equal to the lease liability at the date of adoption.

The Group has elected not to recognise right of use assets and lease liabilities for leases of low-value assets (those with a purchase price of less than £4,000), and lease payments associated with those assets will be recognised as an expense on a straight-line basis. The Group has made use of the practical expedient available on transition to IFRS 16 not to reassess whether a contract is or contains a lease. Where the contracts have been modified on or after 1 July 2019 have been reassessed to determine if it contains a lease as defined by IFRS 16. The Group has not elected to apply IFRS 16 to contracts where the right-of-use asset would be recognised as an intangible asset.

In addition, the Group has utilised the following practical expedients, permitted by IFRS 16:

- the right of use asset for each lease has been measured as the present value of the lease liability adjusted for any prepaid or accrued lease payments prior to application;
- for leases where the remaining term was less than 12 months at 1 July 2019 the group has elected to treat these as short term;
- for leases that were previously classified as an operating lease under IAS 17 'Leases' the lease liability on 1 July 2019 was calculated as the present value of the remaining lease payments using the incremental borrowing rate as at 1 July 2019;
- for existing leases that incurred initial direct costs, were excluded from the measurement of the right of use asset as at 1 July 2019;
- the use of hindsight for existing leases has been applied in determining options to extend or terminate the lease;
- the Group has not elected to separate lease components from non-lease components; and
- the Group has elected to apply a single discount rate to a portfolio of leases with similar characteristics.

Financial impact of IFRS 16

The impact of adopting IFRS 16 on the Group's income statement, balance sheet and statement of cash flows are presented in the following tables:

Impact on the Group's income statement

In the year the adoption of IFRS 16 has had the following impact of the Group's income statement:

	Year ended 30 June 2020 (as reported) £m	Differences between IFRS 16 and IAS 17 £m	Year ended 30 June 2020 (under IAS 17) £m
Operating profit	**47.6**	(0.7)	46.9
Share of post-tax profit of joint ventures and associates retained	**8.9**	-	8.9
Finance costs	**(5.3)**	0.7	(4.6)
Finance income	**0.3**	-	0.3
Profit before tax	**51.5**	-	51.5

Impact on the Group's balance sheet

	1 July 2019 prior to adoption of IFRS 16 (as reported)	Recognised on adoption of IFRS 16	1 July 2019 post adoption of IFRS 16
	£m	£m	£m
Non-current assets			
Property, plant, motor vehicles and equipment	**86.0**	26.6	112.6
Current liabilities			
Obligations under leases	**(2.2)**	(7.5)	(9.7)
Non-current liabilities			
Obligations under leases	**(3.9)**	(19.1)	(23.0)

The following table shows a reconciliation between the operating lease obligations reported at 30 June 2019 and the amount recognised on adoption of IFRS 16 using the weighted average incremental borrowing rate of 2.6% at the date of adoption.

	£m
Operating lease commitments (as at 30 June 2019)	**32.7**
Leases classified as low value or short term	(0.9)
Software licences outside the scope of IFRS 16	(2.3)
Operating lease commitments to be capitalised under IFRS 16	29.5
Impact of discounting	(2.9)
Lease liability (1 July 2019)	**26.6**

Impact on the Group's statement of cashflows

	Year end 30 June 2020 (as reported)	Reclassification on adoption of IFRS 16	Year end 30 June 2020 (under IAS 17)
	£m	£m	£m
Net cash from operating activities	**65.8**	(7.6)	58.2
Net cash outflow from investing activities	**(30.7)**	-	(30.7)
Net cash outflow from financing activities	**(23.1)**	7.6	(15.5)
Net increase in cash and cash equivalents	**12.0**	-	12.0

The reconciliation of the impact on net debt of adopting IFRS 16 can be found in the analysis of the net debt note 14. Following adoption there was no material impact to adjusted earnings per share, earnings per share or taxation.

Leases accounting policy under IFRS 16

In accordance with IFRS 16, we recognise as an expense any payments made in respect of short-term leases (those with a term of less than 12 months) and leases for low-value items on a straight-line basis over the life of the lease.

For all other leases we recognise a right-of-use asset and corresponding liability at the date at which the leased asset is made available for use. Lease liabilities are measured at the present value of the future lease payments, excluding any payments relating to non-lease components. Future lease payments include fixed payments, in-substance fixed payments, and variable lease payments that are based on an index or a rate, less any lease incentives receivable. Lease liabilities also take into account amounts payable under residual value guarantees and payments to exercise options to the extent that it is reasonably certain that such payments will be made. The payments are discounted at the rate implicit in the lease or, where that cannot be measured, at an incremental borrowing rate.

Right-of-use assets are measured initially at cost based on the value of the associated lease liability, adjusted for any payments made before inception, initial direct costs and an estimate of the dismantling, removal and restoration costs required in the terms of the lease. Subsequent to initial recognition, we record an interest charge in respect of the lease liability. The related right-of-use asset is depreciated over the term of the lease or, if shorter, the useful economic life (UEL) of the leased asset. The lease term shall include the period of an extension option where it is reasonably certain that the option will be exercised. Where the lease contains a purchase option the asset is written-off over the useful life of the asset when it is reasonably certain that the purchase option will be exercised.

We re-measure the lease liability (and make a corresponding adjustment to the related right-of-use asset) whenever:-

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.
- the lease payments change due to changes in an index or rate or a change in expected payment under a guaranteed residual value, in which cases the lease liability is remeasured by discounting the revised lease payments using the initial discount rate (unless the lease payments change is due to a change in a floating interest rate, in which case a revised discount rate is used).
- a lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate. The Group did not make any such adjustments during the periods presented.

New standards and interpretations not yet adopted

At the date of the preliminary statement, the following standards and interpretations which have not been applied in the report were in issue but not yet effective (and in some cases had not yet been adopted by the EU). The Group will continue to assess the impact of these amendments prior to their adoption. These are:-

- Amendments to IAS 1 and IAS 8 – 'Definition of Material';
- Amendments to IFRS 3 – 'Definition of a Business';
- Amendments to IFRS 9, IAS 39 and IFRS 7 – 'Interest Rate Benchmark Reform';
- Conceptual Framework for Financial Reporting; and
- IFRS 16 'Covid-19 related rent concessions'.

Going concern

As part of the directors' consideration of the appropriateness of adopting the going concern basis in preparing the financial statements, given the uncertainty arising from COVID-19, our cashflow and net debt projections to December 2021 have been overlaid with a number of sensitivities to ensure we capture a severe downside scenario ‘a COVID-19 scenario’ impact on our profit, headroom and covenants over the going concern period. In addition, we have overlaid these sensitivities with reverse stress tests on both our headroom and banking covenants to ensure the range above and beyond the severe downside scenario is fully assessed.

The COVID-19 scenario sensitivities include 5% reductions in PIC revenue, 10% reduction in ABS volumes, 20% reduction in ABS average selling prices, £8m working capital impact and offset by mitigating actions including savings in costs, reduction in dividends and postponing certain capital spend and investments. Our mitigating actions are all within management control and would not impact our ability to serve our customers.

Our headroom under these sensitivities and reverse stress tests, including our mitigating actions, remain adequate. Based on this assessment, the Directors have a reasonable expectation that the Group has adequate resources to continue its operational existence for the foreseeable future and for a period of at least 12 months from the date of this report. Accordingly, the Directors continue to adopt and consider appropriate the going concern basis in preparing the Annual Report.

Alternative performance measures

In reporting financial information, the Group presents alternative performance measures, (‘APMs’), which are not defined or specified under the requirements of IFRS and which are not considered to be a substitute for, or superior to, IFRS measures.

The Group believes that these APMs provide stakeholders with additional helpful information on the performance of the business. The APMs are consistent with how we plan our business performance and report on it in our internal management reporting to the Board and the executive leadership team. Some of these measures are also used for the purpose of setting remuneration targets.

For a full list of all APMs please see Alternative Performance Measures – Glossary.

Approval

This preliminary announcement was approved by the Board on 7 September 2020.

2. SEGMENTAL INFORMATION

IFRS 8 ‘*Operating Segments’* requires operating segments to be identified on the basis of internal reports about components of the Group that are regularly reviewed by the Chief Executive and the Board to allocate resources to the segments and to assess their performance. The Group’s operating and reporting structure comprises three operating segments: Genus PIC, Genus ABS and Research and Development. These segments are the basis on which the Group reports its segmental information. The principal activities of each segment are as follows:

- Genus PIC – our global porcine sales business;
- Genus ABS – our global bovine sales business; and
- Research and Development – our global spend on research and development.

A segmental analysis of revenue, operating profit, depreciation, amortisation, non-current asset additions, segment assets and liabilities and geographical information is provided below. We do not include our adjusting items in the segments, as we believe these do not reflect the underlying performance of the segments. The accounting policies of the reportable segments are the same as the Group’s accounting policies, as described in the Financial Statements.

Revenue	2020 £m	2019 £m
Genus PIC	**298.8**	253.7
Genus ABS	**237.6**	222.6
Research and Development		
Porcine Product Development	**11.7**	9.4
Bovine Product Development	**3.3**	2.8
Gene Editing	**-**	-
Other Research and Development	**-**	-
	15.0	12.2
	551.4	488.5

Adjusted operating profit by segment is set out below and reconciled to the Group's adjusted operating profit. A reconciliation of adjusted operating profit to profit for the year is shown on face of the Group Income Statement.

Adjusted operating profit	2020 £m	2019 £m
Genus PIC	**113.3**	93.1
Genus ABS	**32.5**	29.9
Research and Development		
Porcine Product Development	**(28.9)**	(18.4)
Bovine Product Development	**(20.6)**	(19.7)
Gene Editing	**(5.2)**	(7.3)
Other Research and Development	**(10.2)**	(9.0)
	(64.9)	(54.4)
Adjusted segment operating profit	**80.9**	68.6
Central	**(15.6)**	(10.9)
Adjusted operating profit	**65.3**	57.7

Our business is not highly seasonal and our customer base is diversified, with no individual customer generating more than 2% of revenue.

Exceptional items of £19.2m expense (2019: £21.8m expense), relate to Genus ABS (£18.4m expense), Genus PIC (£0.5m expense) and our central segment (£0.3m expense). Note 3 provides details of these exceptional items.

We consider share-based payment expenses on a Group-wide basis and do not allocate them to reportable segments.

Other segment information

	Depreciation		Amortisation		Additions to non-current assets	
	2020	2019	**2020**	2019	**2020**	2019
	£m	£m	**£m**	£m	**£m**	£m
Genus PIC	**4.5**	0.7	**7.6**	7.2	**2.7**	1.3
Genus ABS	**11.4**	2.3	**3.2**	2.4	**24.7**	6.8
Research and Development						
Research	**0.5**	0.5	**0.9**	1.2	**1.5**	0.8
Porcine Product Development	**2.4**	2.3	**-**	-	**1.4**	3.0
Bovine Product Development	**1.5**	3.4	**0.2**	2.9	**4.2**	11.5
	4.4	6.2	**1.1**	4.1	**7.1**	15.3
Segment total	**20.3**	9.2	**11.9**	13.7	**34.5**	23.4
Central	**3.7**	3.4	**1.5**	-	**10.0**	9.4
Total	**24.0**	12.6	**13.4**	13.7	**44.5**	32.8

	Segment assets			Segment liabilities		
		*(restated)	*(restated)		*(restated)	*(restated)
	2020	2019	2018	**2020**	2019	2018
	£m	£m	£m	**£m**	£m	£m
Genus PIC	**247.6**	262.1	235.9	**(72.6)**	(51.6)	(48.3)
Genus ABS	**201.3**	157.1	160.6	**(52.9)**	(41.9)	(41.2)
Research and Development						
Research	**7.2**	7.4	12.5	**(3.5)**	(0.6)	(1.3)
Porcine Product Development	**226.3**	180.0	189.0	**(56.3)**	(50.8)	(71.2)
Bovine Product Development	**146.5**	161.5	152.8	**(33.6)**	(32.8)	(31.1)
	380.0	348.9	354.3	**(93.4)**	(84.2)	(103.6)
Segment total	**828.9**	768.1	750.8	**(218.9)**	(177.7)	(193.1)
Central	**39.8**	35.5	17.9	**(142.0)**	(138.8)	(171.7)
Total	**868.7**	803.6	768.7	**(360.9)**	(316.5)	(364.8)

*see note 1 for details of the prior period restatement.

Geographical information

The Group's revenue by geographical segment is analysed below. This analysis is stated on the basis of where the customer is located.

Revenue	**2020**	2019
	£m	£m
North America	**226.4**	211.8
Latin America	**81.8**	81.1
UK	**94.4**	83.7
Rest of Europe, Middle East, Russia and Africa	**78.0**	67.7
Asia	**70.8**	44.2
	551.4	488.5

Non-current assets (excluding deferred taxation and financial instruments)

The Group's non-current assets by geographical segment are analysed below and are stated on the basis of where the assets are located.

	2020	*(restated) 2019	*(restated) 2018
	£m	£m	£m
North America	**454.4**	400.2	429.7
Latin America	**37.3**	45.7	37.4
UK	**78.8**	70.6	41.0
Rest of Europe, Middle East, Russia and Africa	**41.5**	59.3	42.2
Asia	**29.2**	14.7	18.4
	641.2	590.5	568.7

* see note 1 for details of the prior period restatement.

Revenue by type	**2020**	2019
	£m	£m
Sale of animals, semen, embryos, products and ancillary services	**408.1**	358.9
Royalties	**136.2**	122.0
Consulting services	**7.1**	7.6
	551.4	488.5

3. EXCEPTIONAL ITEMS

Operating expense:	**2020**	2019
	£m	£m
Litigation and damages	**(16.4)**	(5.0)
Acquisition and integration	**(2.1)**	(0.7)
Other	**(0.7)**	(0.9)
Pension related	**-**	(15.2)
	(19.2)	(21.8)

Litigation

Litigation includes legal fees of £5.6m (2019: £5.0m) related to the actions between ABS Global, Inc. and certain affiliates ('ABS') and Inguran, LLC and certain affiliates (aka Sexing Technologies ('ST')) and £10.8m (2019: £nil) for damages and costs related to patent infringement.

In July 2014, ABS launched a legal action against ST in the US District Court for the Western District of Wisconsin and initiated anti-trust proceedings which ultimately enabled the launch of ABS's IntelliGen sexing technology in the US market ('ABS I'). In June 2017, ST filed proceedings against ABS in the same District Court, where ST alleged that ABS infringed seven patents and asserted trade secret and breach of contract claims ('ABS II'). The ABS I and ABS II proceedings in the periods before the year ended 30 June 2020 are more fully described in the Notes to the Financial Statements in previous Annual Reports.

Material litigation activities during the year ended 30 June 2020

In relation to ABS II, a hearing proceeded in September 2019, and on 9 September a jury held that ABS' IntelliGen technology infringed US patents 8,206,987 (the ''987 patent'), 7,311,476 (the "476 patent') and 7,611,309 (the "309 patent'), and also found that ST was not in material breach of the 2012 Semen Sorting Agreement. The infringement of the '987 patent confirms ABS' existing obligation from ABS I to pay a royalty of $1.25 for each straw of sexed semen produced in the US and the jury later held that ABS should pay a royalty of $2.60 per straw for infringement of the '476 and '309 patents for 3,295,355 straws sold by ABS up to 30 June 2019. This royalty is retrospective, as ABS had reengineered the IntelliGen technology by incorporating a non-infringing microfluidic chip known as "SSC(B)" prior to the hearing. ST confirmed in court that the SSC(B) chip did not infringe the '476 or '309 patents. ABS has sought judgments as a matter of law ('JMOL') in relation to the invalidity of the '987, '476 and '309 patents, JMOLs in relation to the non-infringement of the '309 and '476 patents, and a reduction in damages awarded by the jury. Once the court has decided on the JMOLs, the parties will consider their options for appeal.

On 29 January 2020, ST filed a new US complaint against ABS ('ABS III'). ST allege infringement of the '987 patent through: (i) the sale, lease or transfer of the IntelliGen technology to third parties; (ii) the importation of sexed semen straws made outside the US using the IntelliGen technology; and (iii) the use of the IntelliGen technology to produce IVF products. ABS has prepared and filed a response to the ABS III complaint, including a motion to dismiss, on the basis that all these issues were fully resolved in either the ABS I or ABS II litigations. The parties await the court's decision.

On March 10, 2020, the USPTO issued patent 10,583,439 (the ''439 patent'), and subsequently ST asked the court for permission to file a supplemental complaint in ABS III asserting infringement of the '439 patent. ABS believes that ST's claim for infringement falls short and has filed an opposition to ST's request.

On April 15, 2020, ST filed a new complaint ('ABS IV'), asserting the same claim of infringement of the '439 patent alleged in its supplemental complaint and then moved to consolidate the ABS IV and ABS III litigation. ABS has opposed this action and has filed a motion for summary dismissal.

On 23 June 2020, the USPTO issued patent 10,689,210 (the ''210 patent'), and on 6 July 2020, ST sought a second supplement of ABS III by adding a claim of '210 patent infringement. ABS has opposed this action. The parties await the court's decision, and in the meantime, ABS is considering its options for responding to ST's assertion of the '439 and '210 patents.

A provision of £10.5m has been recognised in the year ended 30 June 2020 in respect of the royalty per straw for infringement of the '476 and '309 patents claimed by ST through ABS II.

Indian Litigation: In September 2019, ST also filed parallel patent infringement proceedings against ABS in India alleging infringement of the Indian patent 240790 (''790 patent'). The '790 patent is the equivalent of the US '476 patent relating to microfluidic chips. ABS had already sought the revocation of the '790 patent in April 2017 and filed a response and counterclaim seeking the revocation of the '790 patent. This matter is next before the Indian Courts on 8 October 2020 to consider the timetable and the application for a preliminary injunction. All microfluidic chips used by ABS in India are the non-infringing SSC(B) chips.

Acquisitions and integration

During the year, £2.1m (2019: £0.7m) of expenses were incurred in relation to potential acquisitions that were not completed.

Other

Included within 'Other' are £0.8m (2019: £1.5m) of expenses which relate to the costs of entering into our strategic porcine collaboration in China. Included within the 2019 balance is an insurance receipt of £0.6m from a legacy environmental claim.

Pension related

In the prior year, the High Court handed down judgement in the Lloyds Bank pensions case, requiring pension schemes to equalise Guaranteed Minimum Pensions (GMPs). Genus's legacy pension schemes are affected by this ruling, resulting in an aggregate past service charge of £16.1m, partially offset by a settlement gain of £0.9m (net of fees).

4. NET FINANCE COSTS

	2020 **£m**	2019 £m
Interest payable on bank loans and overdrafts	**(2.9)**	(3.3)
Amortisation of debt issue costs	**(0.4)**	(0.4)
Other interest payable	**(0.1)**	-
Unwinding of discount put options	**(0.5)**	-
Net interest cost in respect of pension scheme liabilities	**(0.4)**	(0.9)
Interest on lease liabilities	**(1.0)**	(0.1)
Total interest expense	**(5.3)**	(4.7)
Interest income on bank deposits	**0.3**	0.2
Net settlement income on derivative financial instruments	**-**	0.6
Total interest income	**0.3**	0.8
Net finance costs	**(5.0)**	(3.9)

5. INCOME TAX EXPENSE

Income tax expense	2020 £m	2019 £m
Current tax expense		
Current period	**13.8**	12.6
Adjustment for prior periods	**(1.1)**	(0.9)
Total current tax expense in the Group Income Statement	**12.7**	11.7
Deferred tax expense		
Origination and reversal of temporary differences	**(2.6)**	(7.7)
Adjustment for prior periods	**0.5**	(0.8)
Total deferred tax credit in the Group Income Statement	**(2.1)**	(8.5)
Total income tax expense excluding share of income tax of equity accounted investees	**10.6**	3.2
Share of income tax of equity accounted investees	**2.3**	1.4
Total income tax expense in the Group Income Statement	**12.9**	4.6

6. EARNINGS PER SHARE

Basic earnings per share is the profit generated for the financial year attributable to equity shareholders divided by the weighted average number of shares in issue during the year.

Basic earnings per share from continuing operations	2020 (pence)	2019 (pence)
Basic earnings per share	**62.4**	12.4

The calculation of basic earnings per share from continuing operations for the year ended 30 June 2020 is based on the net profit attributable to owners of the Company from continuing operations of £40.5m (2019: £7.8m) and a weighted average number of ordinary shares outstanding of 64,908,000 (2019: 63,141,000), which is calculated as follows:

Weighted average number of ordinary shares (basic)

	2020 000s	2019 000s
Issued ordinary shares at the start of the year	**65,055**	61,542
Effect of own shares held	**(168)**	(405)
Share placement	**-**	1,697
Shares issued on exercise of stock options	**21**	6
Shares issued in relation to Employee Benefit Trust	**-**	301
Weighted average number of ordinary shares in year	**64,908**	63,141

Diluted earnings per share from continuing operations

	2020 (pence)	2019 (pence)
Diluted earnings per share	**61.9**	11.9

The calculation of diluted earnings per share from continuing operations for the year ended 30 June 2020 is based on the net profit attributable to owners of the Company from continuing operations of £40.5m (2019: £7.8m) and a weighted average number of ordinary shares outstanding, after adjusting for the effects of all potential dilutive ordinary shares, of 65,427,000 (2019: 65,304,000), which is calculated as follows:

Weighted average number of ordinary shares (diluted)

	2020 000s	2019 000s
Weighted average number of ordinary shares (basic)	**64,908**	63,141
Dilutive effect of share awards and options	**519**	763
Impact of share placement	**-**	1,400
Weighted average number of ordinary shares for the purposes of diluted earnings per share	**65,427**	65,304

Adjusted earnings per share from continuing operations	2020 (pence)	2019 (pence)
Adjusted earnings per share	**85.4**	73.2
Diluted adjusted earnings per share	**84.7**	70.7

Adjusted earnings per share is calculated on profit before the net IAS 41 valuation movement on biological assets, amortisation of acquired intangible assets, share-based payment expense and exceptional items, after charging taxation associated with those profits, of £55.4m (2019: £46.2m), which is calculated as follows:

	2020 £m	2019 £m
Profit before tax from continuing operations	**51.5**	9.9
Add/(deduct):		
Net IAS 41 valuation movement on biological assets	**(15.8)**	14.7
Amortisation of acquired intangible assets	**8.5**	9.5
Share-based payment expense	**5.8**	3.0
Exceptional items (see note 3)	**19.2**	21.8
Net IAS 41 valuation movement on biological assets in joint ventures	**0.1**	1.1
Tax on joint ventures and associates	**2.3**	1.4
Attributable to non-controlling interest	**(0.6)**	(0.4)
Adjusted profit before tax	**71.0**	61.0
Adjusted tax charge	**(15.6)**	(14.8)
Adjusted profit after tax	**55.4**	46.2
Effective tax rate on adjusted profit	**22.0%**	24.3%

7. DIVIDENDS

Amounts recognised as distributions to equity holders in the year

	2020 £m	2019 £m
Final dividend		
Final dividend for the year ended 30 June 2019 of 18.8 pence per share	**12.2**	-
Final dividend for the year ended 30 June 2018 of 17.9 pence per share	**-**	11.0
Interim dividend		
Interim dividend for the year ended 30 June 2020 of 9.4 pence per share	**6.1**	-
Interim dividend for the year ended 30 June 2019 of 8.9 pence per share	**-**	5.8
	18.3	16.8

The Directors have proposed a final dividend of 19.7 pence per share for 2020. This is subject to shareholders' approval at the Annual General Meeting and we have therefore not included it as a liability in these financial statements.

8. GOODWILL

	Genus PIC £m	Genus ABS £m	Total £m
Cost			
Balance at 1 July 2018	70.8	31.2	102.0
Acquisitions	-	1.1	1.1
Effect of movements in exchange rates	2.2	1.0	3.2
Balance at 30 June 2019	73.0	33.3	106.3
Effect of movements in exchange rates	1.1	(1.8)	(0.7)
Balance at 30 June 2020	**74.1**	**31.5**	**105.6**
Amortisation and impairment losses			
Balance at 1 July 2018, 30 June 2019 and 30 June 2020	-	-	-
Carrying amounts			
At 30 June 2020	**74.1**	**31.5**	**105.6**
At 30 June 2019	73.0	33.3	106.3

9. INTANGIBLE ASSETS

	Porcine and bovine genetics Technology £m	Brand, multiplier contracts and customer relationships £m	Separately identified acquired intangible assets £m	Software £m	Assets under construction £m	IntelliGen £m	Patents, licences and other £m	Total £m
Cost								
Balance at 1 July 2018	51.7	80.5	132.2	12.0	3.4	22.2	3.9	173.7
Additions	-	-	-	1.4	8.8	1.0	0.5	11.7
Acquisitions	-	1.8	1.8	-	-	-	-	1.8
Transfers	-	-	-	1.2	(1.2)	-	-	-
Disposals	-	-	-	(0.1)	-	-	(0.1)	(0.2)
Effect of movements in exchange rates	1.3	2.8	4.1	0.2	-	0.8	0.1	5.2
Balance at 30 June 2019	53.0	85.1	138.1	14.7	11.0	24.0	4.4	192.2
Additions	**-**	**-**	**-**	**0.1**	**8.9**	**1.8**	**-**	**10.8**
Disposals	**-**	**-**	**-**	**(0.6)**	**-**	**(1.0)**	**-**	**(1.6)**
Transfers	**-**	**-**	**-**	**13.6**	**(13.6)**	**-**	**-**	**-**
Effect of movements in exchange rates	**(1.0)**	**0.8**	**(0.2)**	**0.1**	**-**	**0.6**	**-**	**0.5**
Balance at 30 June 2020	**52.0**	**85.9**	**137.9**	**27.9**	**6.3**	**25.4**	**4.4**	**201.9**
Amortisation and impairment losses								
Balance at 1 July 2018	27.7	53.7	81.4	9.3	-	2.5	1.8	95.0
Impairment	-	-	-	1.2	-	-	-	1.2
Disposals	-	-	-	(0.1)	-	-	-	(0.1)
Amortisation for the year	2.7	6.8	9.5	1.0	-	2.1	1.1	13.7
Effect of movements in exchange rates	0.4	1.3	1.7	0.2	-	0.4	-	2.3
Balance at 30 June 2019	30.8	61.8	92.6	11.6	-	5.0	2.9	112.1
Impairment	**-**	**-**	**-**	**0.2**	**-**	**-**	**-**	**0.2**
Disposals	**-**	**-**	**-**	**-**	**-**	**(0.4)**	**-**	**(0.4)**
Amortisation for the year	**2.9**	**5.6**	**8.5**	**1.6**	**-**	**2.3**	**1.0**	**13.4**
Effect of movements in exchange rates	**(0.5)**	**0.8**	**0.3**	**0.1**	**-**	**-**	**-**	**0.4**
Balance at 30 June 2020	**33.2**	**68.2**	**101.4**	**13.5**	**-**	**6.9**	**3.9**	**125.7**
Carrying amounts								
At 30 June 2020	**18.8**	**17.7**	**36.5**	**14.4**	**6.3**	**18.5**	**0.5**	**76.2**
At 30 June 2019	22.2	23.3	45.5	3.1	11.0	19.0	1.5	80.1
At 30 June 2018	24.0	26.8	50.8	2.7	3.4	19.7	2.1	78.7

Included within the Software class of assets is £11.5m and included in assets in the course of construction is £5.7m that relate to the on-going development costs of GenusOne, our single global enterprise system.

10. BIOLOGICAL ASSETS

Fair value of biological assets	Bovine	(restated*) Porcine	(restated*) Total
	£m	£m	£m
Balance at 30 June 2018 (as previously reported)	104.0	238.8	342.8
Prior period adjustment (see note 1)	-	(20.5)	(20.5)
Balance at 30 June 2018 (restated*)	104.0	218.3	322.3
Non-current biological assets	104.0	181.3	285.3
Current biological assets	-	37.0	37.0
Balance at 30 June 2018 (restated*)	104.0	218.3	322.3
Increases due to purchases	9.2	117.5	126.7
Decreases attributable to sales	-	(191.5)	(191.5)
Decrease due to harvest	(25.3)	(22.2)	(47.5)
Changes in fair value less estimated sale costs	7.2	97.2	104.4
Effect of movements in exchange rates	3.6	9.2	12.8
Balance at 30 June 2019 (restated*)	98.7	228.5	327.2
Non-current biological assets	98.7	188.4	287.1
Current biological assets	-	40.1	40.1
Balance at 30 June 2019 (restated*)	98.7	228.5	327.2
Increases due to purchases	**17.5**	**118.7**	**136.2**
Decreases attributable to sales	**-**	**(217.3)**	**(217.3)**
Decrease due to harvest	**(24.5)**	**(22.7)**	**(47.2)**
Changes in fair value less estimated sale costs	**13.5**	**130.6**	**144.1**
Effect of movements in exchange rates	**2.0**	**4.9**	**6.9**
Balance at 30 June 2020	**107.2**	**242.7**	**349.9**
Non-current biological assets	**107.2**	**202.9**	**310.1**
Current biological assets	**-**	**39.8**	**39.8**
Balance at 30 June 2020	**107.2**	**242.7**	**349.9**

*see note 1 for details of the prior period restatement

Bovine biological assets include £5.5m (2019: £3.9m) representing the fair value of bulls owned by third parties but managed by the Group, net of expected future payments to such third parties, which are therefore treated as assets held under finance leases.

There were no movements in the carrying value of the bovine biological assets in respect of sales or other changes during the year.

A risk adjusted rate of 8.8% (2019: 8.8%) has been used to discount future net cash flows from the sale of bull semen.

Decreases due to harvest represent the semen extracted from the biological assets. Inventories of such semen are shown as biological asset harvest.

In porcine, included in increases due to purchases is the aggregate increase arising during the year on initial recognition of biological assets in respect of multiplier purchases, other than parent gilts, of £46.3m (2019: £36.3m).

Decreases attributable to sales during the year of £217.3m (2019: £191.5m) include £68.1m (2019: £71.4m) in respect of the reduction in fair value of the retained interest in the genetics of animals, other than parent gilts, transferred under royalty contracts.

Also included is £101.6m (2019: £85.4m) relating to the fair value of the retained interest in the genetics in respect of animals, other than parent gilts, sold to customers under royalty contracts in the year.

Total revenue in the year, including parent gilts, includes £205.8m (2019: £179.6m) in respect of these contracts, comprising £69.8m (2019: £57.6m) on initial transfer of animals and semen to customers and £136.0m (2019: £122.0m) in respect of royalties received.

A risk adjusted rate of 9.3% (2019: 11.0%) has been used to discount future net cash flows from the expected output of the pure line porcine herds. The number of future generations which have been taken into account is seven (2019: seven) and their estimated useful lifespan is 1.4 years (2019: 1.4 years).

Year ended 30 June 2020

	Bovine £m	**Porcine £m**	**Total £m**
Net IAS 41 valuation movement on biological assets*			
Changes in fair value of biological assets	**13.5**	**130.6**	**144.1**
Inventory transferred to cost of sales at fair value	**(10.9)**	**(22.7)**	**(33.6)**
Biological assets transferred to cost of sales at fair value	**-**	**(95.1)**	**(95.1)**
	2.6	**12.8**	**15.4**
Fair value movement in related financial derivative	**-**	**0.4**	**0.4**
	2.6	**13.2**	**15.8**

Year ended 30 June 2019

	Bovine £m	**Porcine £m**	**Total £m**
Net IAS 41 valuation movement on biological assets*			
Changes in fair value of biological assets	7.2	97.2	104.4
Inventory transferred to cost of sales at fair value	(20.0)	(22.2)	(42.2)
Biological assets transferred to cost of sales at fair value	-	(77.2)	(77.2)
	(12.8)	(2.2)	(15.0)
Fair value movement in related financial derivative	-	0.3	0.3
	(12.8)	(1.9)	(14.7)

*This represents the difference between operating profit prepared under IAS 41 and operating profit prepared under historical cost accounting, which forms part of the reconciliation to adjusted operating profit.

11. PROPERTY PLANT AND EQUIPMENT

	Land and buildings £m	Plant, motor vehicles and equipment £m	Assets under construction £m	Total Owned Assets £m	Land and Buildings £m	Plant, motor vehicles and equipment £m	Total Right of Use Assets £m	Total £m
Cost or deemed cost								
Balance at 1 July 2018	56.5	78.1	4.0	138.6	-	-	-	138.6
Additions	1.0	10.1	10.0	21.1	-	-	-	21.1
Transfers	3.5	6.0	(9.5)	-	-	-	-	-
Disposals	(1.6)	(6.0)	(0.1)	(7.7)	-	-	-	(7.7)
Effect of movements in exchange rates	2.7	3.1	0.3	6.1	-	-	-	6.1
Balance at 30 June 2019	62.1	91.3	4.7	158.1	-	-	-	158.1
Recognised on the adoption of IFRS 16	**-**	**-**	-	**-**	**19.7**	**6.9**	**26.6**	**26.6**
Transfers on adoption of IFRS 16	**-**	**(12.2)**	-	**(12.2)**	**-**	**12.2**	**12.2**	**-**
Additions	**0.4**	**9.4**	**14.8**	**24.6**	**1.9**	**7.2**	**9.1**	**33.7**
Transfers	**6.6**	**4.7**	**(11.3)**	**-**	**-**	-	**-**	**-**
Disposals	**(1.6)**	**(5.4)**	-	**(7.0)**	**-**	**(2.7)**	**(2.7)**	**(9.7)**
Effect of movements in exchange rates	**0.4**	**-**	-	**0.4**	**0.3**	**0.4**	**0.7**	**1.1**
Balance at 30 June 2020	**67.9**	**87.8**	**8.2**	**163.9**	**21.9**	**24.0**	**45.9**	**209.8**
Depreciation and impairment losses								
Balance at 1 July 2018	18.1	43.6	-	61.7	-	-	-	61.7
Depreciation for the year	3.0	9.6	-	12.6	-	-	-	12.6
Disposals	(1.5)	(4.7)	-	(6.2)	-	-	-	(6.2)
Effect of movements in exchange rates	1.2	2.8	-	4.0	-	-	-	4.0
Balance at 30 June 2019	20.8	51.3	-	72.1	-	-	-	72.1
Transfers on the adoption of IFRS 16	**-**	**(4.8)**	-	**(4.8)**	**-**	**4.8**	**4.8**	**-**
Depreciation for the year	**3.8**	**9.3**	-	**13.1**	**4.4**	**6.5**	**10.9**	**24.0**
Disposals	**(0.7)**	**(2.7)**	-	**(3.4)**	**-**	**(1.5)**	**(1.5)**	**(4.9)**
Effect of movements in exchange rates	**0.4**	**-**	-	**0.4**	**-**	**0.3**	**0.3**	**0.7**
Balance at 30 June 2020	**24.3**	**53.1**	-	**77.4**	**4.4**	**10.1**	**14.5**	**91.9**
Carrying amounts								
At 30 June 2020	**43.6**	**34.7**	**8.2**	**86.5**	**17.5**	**13.9**	**31.4**	**117.9**
At 30 June 2019	41.3	40.0	4.7	86.0	-	-	-	86.0

12. TRADE AND OTHER RECEIVABLES

	2020	2019
	£m	£m
Trade receivables	**83.7**	85.4
Less expected credit loss allowance	**(3.4)**	(2.6)
Trade receivables net of impairment	**80.3**	82.8
Other debtors	**6.3**	5.1
Prepayments	**6.6**	5.3
Accrued income	**5.1**	2.9
Other taxes and social security	**2.5**	1.9
Current trade and other receivables	**100.8**	98.0
Non- Current other receivables	**1.8**	-
	102.6	98.0

Trade receivables

The average credit period our customers take on the sales of goods is 53 days (2019: 62 days). We do not charge interest on receivables for the first 30 days from the date of the invoice.

The Group always measures the loss allowance for trade receivables at an amount equal to lifetime expected credit losses ("ECL"). The expected credit losses on trade receivables are estimated using a provision matrix by reference to past default experience of the debtor and an analysis of the debtor's current financial position, adjusted for factors that are specific to the general economic conditions of the industry and country in which the debtors operates and an assessment of both the current and the forecast direction of conditions at the reporting date. The Group writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, such as when the debtor has been placed under liquidation or has entered into bankruptcy proceedings

No customer represents more than 5% of the total balance of trade receivables (2019: nil).

13. RETIREMENT BENEFIT OBLIGATIONS

The Group operates a number of defined contribution and defined benefit pension schemes covering many of its employees. The principal funds are the Milk Pension Fund and Dalgety Pension Fund in the UK, which are defined benefit schemes. The assets of these funds are held separately from the assets of the Group, are administered by trustees and managed professionally. These schemes are closed to new members.

The financial positions of the defined benefit schemes, as recorded in accordance with IAS 19 and IFRIC 14, are aggregated for disclosure purposes. The liability split by principal scheme is set out below.

	2020 **£m**	2019 £m
The Milk Pension Fund – Genus's share	**7.5**	14.1
The Dalgety Pension Fund	**-**	-
National Pig Development Pension Fund	**0.7**	0.8
Post-retirement healthcare	**0.6**	0.6
Other unfunded schemes	**9.3**	8.7
Overall net pension liability	**18.1**	24.2

Overall, we expect to pay £8.0m (2020: £8.4m) in contributions to defined benefit plans in the 2021 financial year.

Summary of movements in Group deficit during the year

	2020 **£m**	2019 £m
Deficit in schemes at the start of the year	**(24.2)**	(33.9)
Administration expenses	**(0.5)**	(0.9)
Exceptional cost of GMP equalisation	**-**	(16.1)
Exceptional gain on settlement	**-**	1.1
Contributions paid into the plans	**8.4**	7.6
Net pension finance cost	**(0.4)**	(0.9)
Actuarial losses recognised during the year	**(16.6)**	(5.4)
Movement in restriction of assets	**10.4**	(10.1)
Release of additional liability	**4.7**	34.5
Exchange rate adjustment	**0.1**	(0.1)
Deficit in schemes at the end of the year	**(18.1)**	(24.2)

The expense/(income) is recognised in the following line items in the Income Statement

	2020 **£m**	2019 £m
Administrative expenses	**0.5**	0.9
Exceptional cost of GMP equalisation	**-**	16.1
Exceptional gains on settlement and past service	**-**	(1.1)
Net finance charge	**0.4**	0.9
	0.9	16.8

Actuarial assumptions and sensitivity analysis

Principal actuarial assumptions (expressed as weighted averages) are:

	2020	2019
Discount rate	**1.65%**	2.35%
Consumer Price Index (CPI)	**2.10%**	2.15%
Retail Price Index (RPI)	**2.80%**	3.15%

The mortality assumptions used are consistent with those recommended by the schemes' actuaries and reflect the latest available tables, adjusted for the experience of the scheme where appropriate. For 2020, the mortality tables used are 97% of the S2NA tables, with birth year and 2019 CMI projections with a smoothing parameter of Sk = 7.0, subject to a long-term rate of improvement of 1.25% for males and females and 2019, the mortality tables used are 97% of the S2NA tables, with birth year and 2017 CMI projections with a smoothing parameter of Sk = 7.5, subject to a long-term rate of improvement of 1.25% for males and females.

14. NOTES TO THE CASH FLOW STATEMENT

	2020	2019
	£m	£m
Profit for the year	**40.9**	6.7
Adjustment for:		
Net IAS 41valuation movement on biological assets	**(15.8)**	14.7
Amortisation of acquired intangible assets	**8.5**	9.5
Share-based payment expense	**5.8**	3.0
Share of profit of joint ventures and associates	**(8.9)**	(5.1)
Finance costs (net)	**5.0**	3.9
Income tax expense	**10.6**	3.2
Exceptional items	**19.2**	21.8
Adjusted operating profit from continuing operations	**65.3**	57.7
Depreciation of property, plant and equipment	**24.0**	12.6
Loss on disposal of plant and equipment	**3.7**	-
Loss/(profit) on disposal of intangible assets	**1.2**	(0.1)
Amortisation and impairment of intangible assets	**5.1**	5.4
Adjusted earnings before interest, tax, depreciation and amortisation	**99.3**	75.6
Cash impact of exceptional items	**(5.8)**	(7.3)
Other movements in biological assets and harvested produce	**(2.9)**	(5.5)
(Decrease)/increase in provisions and release in deferred consideration	**(2.2)**	1.5
Additional pension contributions in excess of pension charge	**(7.9)**	(6.7)
Other	**(0.9)**	(4.1)
Operating cash flows before movement in working capital	**79.6**	53.5
Decrease/(increase) in inventories	**0.1**	(3.2)
Increase in receivables	**(8.8)**	(6.6)
Increase in payables	**12.0**	4.7
Cash generated by operations	**82.9**	48.4
Interest received	**0.3**	0.2
Interest and other finance costs paid	**(3.4)**	(3.2)
Interest on leased assets	**(1.0)**	(0.1)
Cash flow from derivative financial instruments	**0.5**	0.6
Income taxes paid	**(13.5)**	(12.5)
Net cash from operating activities	**65.8**	33.4

Analysis of net debt

Total changes in liabilities due to financing activities are as follows:

	At 1 July 2019 £m	Adoption of IFRS 16 leases £m	At 1 July 2019 £m	**Net cash flows £m**	**Foreign exchange £m**	**Other non-cash movements £m**	**At 30 June 2020 £m**
Cash and cash equivalents	30.5	-	30.5	**12.0**	**(1.2)**	**-**	**41.3**
Interest-bearing loans – current	(2.1)	-	(2.1)	**(6.6)**	**(0.1)**	**(0.4)**	**(9.2)**
Lease liabilities – Current	(2.2)	(7.5)	(9.7)	**11.1**	**(0.1)**	**(11.3)**	**(10.0)**
	(4.3)	(7.5)	(11.8)	**4.5**	**(0.2)**	**(11.7)**	**(19.2)**
Interest-bearing loans – non-current	(101.9)	-	(101.9)	**0.4**	**(2.1)**	**-**	**(103.6)**
Lease liabilities – non- current	(3.9)	(19.1)	(23.0)	**-**	**(0.3)**	**2.2**	**(21.1)**
	(105.8)	(19.1)	(124.9)	**0.4**	**(2.4)**	**2.2**	**(124.7)**
Total debt financing	(110.1)	(26.6)	(136.7)	**4.9**	**(2.6)**	**(9.5)**	**(143.9)**
Net debt	(79.6)	(26.6)	(106.2)	**16.9**	**(3.8)**	**(9.5)**	**(102.6)**

Included within non-cash movements is £9.5m in relation to new finance leases and unwinding of debt issue costs.

15. CONTINGENCIES AND BANK GUARANTEES

Contingent liabilities are potential future cash outflows, where the likelihood of payments is considered more than remote but is not considered probable or cannot be measured reliably. Assessing the amount of liabilities that are not probable is highly judgemental.

The retirement benefit obligations referred to in note 13 include obligations relating to the MPF defined benefit scheme. Genus, together with other participating employers, is joint and severally liable for the scheme's obligations. Genus has accounted for its section and its share of any orphan assets and liabilities, collectively representing approximately 86% (2019: 86%) of the MPF. As a result of the joint and several liability, Genus has a contingent liability for the scheme's obligations that it has not accounted for.

The Group has widespread global operations and is consequently a defendant in many legal, tax and customs proceedings incidental to those operations. In addition, there are contingent liabilities arising in the normal course of business in respect of indemnities, warranties and guarantees. These contingent liabilities are not considered to be unusual in the context of the normal operating activities of the Group. Provisions have been recognised in accordance with the Group accounting policies where required. None of these claims are expected to result in a material gain or loss to the Group.

As described in note 3, the Group is involved in on-going litigation proceedings and investigations with ST that are at various legal stages. The Group makes a provision for amounts to the extent where an outflow of economic benefit is probable and can be reliably estimated. However, there are specific claims identified in the litigation which the Group considers the outcome of the claim is not probable and will not result in the outflow of economic benefit.

The Group's future tax charge and effective tax rate could be affected by factors such as countries reforming their tax legislation to implement the OECD's BEPS recommendations and by European Commission initiatives including state aid investigations.

At 30 June 2020, we had entered into bank guarantees totalling £5.9m (2019: £4.0m).

16. DEFERRED CONSIDERATION

	Contingent deferred consideration £m	Deferred consideration £m	Total £m
Balance at 1 July 2018	-	19.3	19.3
Additional provision in the year	-	6.2	6.2
Payment of consideration	-	(19.3)	(19.3)
Balance at 30 June 2019	-	6.2	6.2
Reclassified from provisions	**4.5**	**-**	**4.5**
Payment of consideration	**(0.6)**	**(1.1)**	**(1.7)**
Release of unutilised contingent consideration	**(0.4)**	**-**	**(0.4)**
Effect of movement in exchange rates	**0.1**	**-**	**0.1**
Balance at 30 June 2020	**3.6**	**5.1**	**8.7**

	Contingent deferred consideration £m	Deferred consideration £m	Total £m
Current	**2.8**	**4.7**	**7.5**
Non-current	**0.8**	**0.4**	**1.2**
Balance at 30 June 2020	**3.6**	**5.1**	**8.7**
Current	-	2.0	2.0
Non-current	-	4.2	4.2
Balance at 30 June 2019	-	6.2	6.2

The balance at 30 June 2020 relates to the following transactions:

	Fiscal year of transaction	Contingent deferred consideration £m	Deferred consideration £m	Total £m
De Novo Genetics LLC	2017	**-**	**0.8**	**0.8**
Hermitage Genetics DAC	2017	**2.8**	**-**	**2.8**
Avlscenter Møllevang A/S	2018	**-**	**4.3**	**4.3**
Dairy LLC (n/a Bovisync)	2019	**0.4**	**-**	**0.4**
Progenex S.L.	2019	**0.4**	**-**	**0.4**
Balance at 30 June 2020		**3.6**	**5.1**	**8.7**

17. NON-CONTROLLING INTEREST

	2020 £m	2019 £m
Non-controlling interest	**4.6**	4.2
Put option over non-controlling interest at inception	**(5.6)**	(5.5)
Total non-controlling interest	**(1.0)**	(1.3)

Summarised financial information in respect of each of the Group's subsidiaries that has a material non-controlling interest is set out below before intra-Group eliminations.

	De Novo Genetics LLC £m	PIC Italia S.r.l £m	2020 £m
Revenue	**3.7**	**4.1**	**7.8**
Expenses	**(3.1)**	**(3.2)**	**(6.3)**
Total comprehensive income for the year	**0.6**	**0.9**	**1.5**
Total comprehensive income attributable to owners of the company	**0.3**	**0.8**	**1.1**
Total comprehensive income attributable to the non-controlling interest	**0.3**	**0.1**	**0.4**
Biological assets	**14.9**	**-**	**14.9**
Current assets	**1.3**	**1.2**	**2.5**
Other non-current assets	**0.8**	**0.9**	**1.7**
Current liabilities	**(8.8)**	**(0.6)**	**(9.4)**
Net assets	**8.2**	**1.5**	**9.7**
Equity attributable to owners of the Company	**(3.8)**	**(1.3)**	**(5.1)**
Non-controlling interest	**4.4**	**0.2**	**4.6**

No dividends were paid to non-controlling interests (2019: £nil).

	De Novo Genetics LLC £m	PIC Italia S.r.l £m	2019 £m
Revenue	2.1	2.9	5.0
Expenses	(4.6)	(2.1)	(6.7)
Total comprehensive income/(loss) for the year	(2.5)	0.8	1.7
Total comprehensive (loss)/income attributable to owners of the company	(1.3)	0.7	0.6
Total comprehensive (loss)/income attributable to the non-controlling interest	(1.2)	0.1	(1.1)
Biological assets	11.6	-	11.6
Current assets	1.2	0.8	2.0
Other non-current assets	0.8	1.4	2.2
Current liabilities	(6.1)	(0.7)	(6.8)
Net assets	7.5	1.5	9.0
Equity attributable to owners of the Company	(3.5)	(1.3)	(4.8)
Non-controlling interest	4.0	0.2	4.2

18. POST BALANCE SHEET EVENTS

A new credit facility agreement with a syndicate of eight banks was signed post year end on 24 August 2020. The new facility consists of a £150m multi-currency RCF, a USD125m RCF and a USD20m bond and guarantee facility. The US dollar bond is being used to provide security in relation to damages claimed under the ABS II litigation relating to the '987 patent royalties (up to 5 June 2020), the '476 and '309 patent royalties (up to 8 June 2020) and includes accrued interest and is subject to the outcome of any appeal.

The term of the new credit facility is for three years with an option to extend the maturity date before the first and second anniversaries of the signing date for a further year. The facility also includes an uncommitted £100m accordion option which can be requested on a maximum of three occasions over the lifetime of the facility to fund the Group's business development plans.

Alternative Performance Measures ('APMs) - Glossary

The Group tracks a number of APMs in managing its business, which are not defined or specified under the requirements of IFRS because they exclude amounts that are included in, or include amounts that are excluded from, the most directly comparable measure calculated and presented in accordance with IFRS, or are calculated using financial measures that are not calculated in accordance with IFRS.

The Group believes that these APMs, which are not considered to be a substitute for or superior to IFRS measures, provide stakeholders with additional helpful information on the performance of the business. These APMs are consistent with how the business performance is planned and reported within the internal management reporting to the Board and executive leadership team. Some of these APMs are also used for the purpose of setting remuneration targets.

These APM should be viewed as supplemental to, but not as a substitute for, measures presented in the consolidated financial information relating to the Group, which are prepared in accordance with IFRS. The Group believes that these APMs are useful indicators of its performance. However, they may not be comparable to similarly-titled measures reported by other companies due to differences in the way they are calculated. The key APMs that the Group uses include:

<table>
<tr><th>Alternative Performance Measures</th><th>Calculation methodology and closest equivalent IFRS measure (where applicable)</th><th>Reasons why we believe the APMs are useful</th></tr>
<tr><td colspan="3">Income statement measures</td></tr>
<tr><td>Adjusted operating profit exc JVs</td><td>Adjusted operating profit is operating profit with the net IAS 41 valuation movement on biological assets, amortisation of acquired intangible assets, share-based payment expense and exceptional items added back and excludes JV and associate results.

Closest equivalent IFRS measure:-
Operating profit*

See reconciliation below.</td><td rowspan="6">Allows the comparability of underlying financial performance by excluding the impacts of exceptional items and is a performance indicator against which short-term and long-term incentive outcomes for our senior executives are measured.
• net IAS 41 valuation movements on biological assets – these movements can be materially volatile and do not directly correlate to the underlying trading performance in the period. Furthermore, the movement is non-cash related and many assumptions used in the valuation model are based on projections rather than current trading;
• amortisation of acquired intangible assets – excluding this improves the comparability between acquired and organically grown operations, as the latter cannot recognise internally generated intangible assets. Adjusting for amortisation provides a more consistent basis for comparison between the two;
• share based payments – this expense is considered to be relatively volatile and not fully reflective of the current period trading, as the performance criteria are based on EPS performance over a three-year period and include</td></tr>
<tr><td>Adjusted operating profit inc JVs</td><td>Including adjusted operating profit from JV and associate results.

See reconciliation below.</td></tr>
<tr><td>Adjusted operating profit inc JVs exc gene editing costs</td><td>Including adjusted operating profit from JV and associate results but excluding gene editing costs.

See reconciliation below.</td></tr>
<tr><td>Adjusted operating profit inc JVs exc impact of IFRS 16 adoption</td><td>Excludes the impact of IFRS 16 on adoption.

See reconciliation below.</td></tr>
<tr><td>Adjusted operating profit inc JVs after tax</td><td>Adjusted operating profit inc JVs less adjusted effective tax.

See reconciliation below.</td></tr>
<tr><td>Adjusted operating profit inc JVs exc</td><td>Adjusted operating profit before tax, exc the impact of IFRS 16 on adoption less adjusted effective tax.</td></tr>
</table>

impact of IFRS 16 adoption after tax	See reconciliation below.	estimates of future performance; and • exceptional items – these are items which due to either their size or their nature are excluded to improve the understanding of the Group's underlying performance.
Adjusted profit inc JVs before tax	Adjusted operating profit inc JVs less net finance costs See reconciliation below.	
Adjusted profit inc JVs after tax	Adjusted profit inc JVs before tax less adjusted effective tax. See reconciliation below.	
Adjusted effective tax rate	Total income tax charge for the Group excluding the tax impact of adjusting items divided the adjusted operating profit *Closest equivalent IFRS measure:-* *Effective tax rate* See reconciliation below.	Provides an underlying tax rate to allow comparability of underlying financial performance by excluding the impacts of net IAS 41 valuation movement on biological assets, amortisation of acquired intangible assets, share-based payment expense and exceptional items.
Adjusted basic earnings per share	Adjusted profit after tax divided by the weighted basic average number of shares *Closest equivalent IFRS measure:-* *Earnings per share* See calculation below.	On a per share basis, this allows the comparability of underlying financial performance by excluding the impacts of adjusting items.
Adjusted diluted earnings per share	Underlying attributable profit divided by the diluted weighted average number of shares *Closest equivalent IFRS measure:-* *Diluted earnings per share* See calculation below.	
Adjusted earnings cover	Adjusted earnings per share divided by the expected dividend for the year. See calculation below.	The board dividend policy targets the adjusted earning cover to be between 2.5 – 3 times
Adjusted EBITDA- calculated in accordance with the definitions used in our financing facilities	This is adjusted operating profit, adding back cash received from our joint ventures, depreciation of property, plant & equipment, depreciation of the historical cost of biological assets, operational amortisation (i.e. excluding amortisation on acquired intangibles) and deducting the amount attributable to minority interest. *Closest equivalent IFRS measure:-* *Operating profit** See calculation & reconciliation below.	This APM is presented because it is used in calculating our ratio of net debt to EBITDA and our interest cover which we report to our banks to ensure compliance with our bank covenants.
Adjusted operating margin	Adjusted operating profit (inc JV) divided by Revenue	Allows for the comparability of underlying financial performance by excluding the impacts of exceptional items.
Adjusted operating margin (exc JV)	Adjusted operating profit (exc JV) divided by Revenue	
Constant currency basis	The Group reports certain financial measures, on both a reported and constant currency basis and retranslates the current year's results at the average actual exchange rates used in the previous financial year.	The Group business operates in multiple worldwide and its trading results when translated back into the groups functional currency of £ Sterling. This measure eliminates the effects of exchange rate

		fluctuations when comparing the year-on-year reported results.
Balance sheet measures		
Net debt	Net debt is gross debt, made up of unsecured bank loans and overdrafts and obligations under finance leases, with a deduction for cash and cash equivalents. See reconciliation below.	This allows the Group to monitor its levels of debt.
Net debt exc the impact of adopting IFRS 16	Net debt less the impact of adopting IFRS 16 leases over IAS 17. See reconciliation below.	This allows a comparative to prior year.
Net debt - calculated in accordance with the definitions used in our financing facilities	Net debt exc the impact of adopting IFRS 16 and adding back guarantees and deferred purchase arrangements. See reconciliation below.	This is a key metric that we report to our banks to ensure compliance with our bank covenants.
Cash flow measures		
Cash conversion	Cash generated by operations as a percentage of adjusted operating profit exc JVs. See calculation below.	This is used to measure how much operating cash flow we are generating and how efficient we are at converting our operating profit into cash.
Cash conversion exc the impact of adopting IFRS 16	Cash generated by operations as a percentage of adjusted operating profit exc joint ventures exc the impact of adopting IFRS 16. See calculation below.	This allows a comparative to prior year.
Free cashflow	Cash generated by the Group before debt repayments, acquisitions and investments, dividends and proceeds from share issues *Closest equivalent IFRS measure:-* *Net cashflow from operating activities* See reconciliation below	Shows the cash retained by the group in the year.
Other measures		
Interest cover	The ratio of adjusted net finance costs, calculated in accordance with the definitions used in our financing facilities, is net finance costs with a deduction for pension interest, interest from adopting IFRS 16, unwinding of discount on put options and amortisation of refinancing fees, to Adjusted EBITDA. *Closest equivalent IFRSs components for the ratio:-* *The equivalent IFRS components are finance costs, finance income and operating profit* See calculation and reconciliation below	This APM is used to understand our ability to meet our interest payments and is also a key metric that we report to our banks to ensure compliance with our bank covenants.
Ratio of net debt to Adjusted EBITDA	The ratio of net debt, calculated in accordance with the definitions used in our financing facilities, is gross debt, made up of unsecured bank loans and overdrafts and obligations under finance leases, with a deduction for cash and cash equivalents and adding back amounts related to	This APM is used as a measurement of our leverage and is also a key metric that we report to our banks to ensure compliance with our bank covenants.

	guarantees and deferred purchase arrangements, to EBITDA. *Closest equivalent IFRSs components for the ratio:- The equivalent IFRS components are gross debt, cash and cash equivalents and operating profit.* See calculation below	
Return on Adjusted Invested Capital	The Group's return on adjusted invested capital is measured on the basis of adjusted operating profit including joint ventures after tax, which is operating profit with the pre-tax share of profits from joint ventures and associates, net IAS 41 valuation movement on biological assets, amortisation of acquired intangible assets, share-based payment expense and exceptional items added back, net of amounts attributable to non-controlling interest and tax. The adjusted operating profit including joint ventures after tax is divided by adjusted invested capital, which is the equity attributable to owners of the company adding back net debt, pension liability net of related deferred tax and deducting biological assets (less historical cost) and goodwill, net of related deferred tax. *Closest equivalent IFRSs components for the ratio:- Return on Invested Capital* See calculation & reconciliation below.	This APM is used to measure our ability to efficiently invest our capital and gives us a sense of how well we are using our resources to generate returns.
Return on Adjusted Invested Capital exc the impact of IFRS 16 adoption	Excludes the impact of IFRS 16 on adoption. See reconciliation below	This allows a comparative to prior year.

* *Operating profit is not defined per IFRS. It is presented in the Group Income Statement and is shown as profit before tax, finance income/costs and share of post-tax profit of joint ventures and associates retained.*

The tables below reconcile the closest equivalent IFRS measure to the APM or outline the calculation of the APM.

Income Statement Measures

	2020		2019		
Adjusted operating profit exc JVs					
Adjusted operating profit inc JVs					
Adjusted operating profit inc JVs and exc gene editing costs	**£m**	**£m**	**£m**	**£m**	**Reference**
Operating Profit		**47.6**		**8.7**	Group Income Statement
Add back:					
Net IAS 41 valuation movement on biological assets	(15.8)		14.7		Group Income Statement
Amortisation of acquired intangible assets	8.5		9.5		Group Income Statement
Share-based payment expense	5.8		3.0		Group Income Statement
Exceptional items	19.2		21.8		Group Income Statement
Adjusted operating profit exc JVs		**65.3**		**57.7**	Group Income Statement
Less: amounts attributable to non-controlling interest		(0.6)		(0.4)	
Operating profit from joint ventures and associates	8.9		5.1		Group Income Statement
Tax on joint ventures and associates	2.3		1.4		Note 5 – Income tax expense
Net IAS 41 valuation movement	0.1		1.1		No direct reference
Adjusted operating profit from joint ventures		11.3		7.6	
Adjusted operating profit inc JVs		**76.0**		**64.9**	
Gene editing costs		5.2		7.3	Note 2 - Segmental information
Adjusted operating profit inc JVs and exc gene editing costs		**81.2**		**72.2**	

Adjusted operating profit inc JVs exc impact of IFRS 16 adoption	**2020 £m**	**2019 £m**	**Reference**
Adjusted operating profit inc JVs	**76.0**	**64.9**	See APM
Deduct:			
Finance costs on impact of IFRS 16 adoption	(0.7)	-	Note 1 - Reporting Entity
Adjusted operating profit inc JVs exc impact of IFRS 16 adoption	**75.3**	**64.9**	

Adjusted operating profit inc JVs after tax	**2020 £m**	**2019 £m**	**Reference**
Adjusted operating profit inc JV	**76.0**	**64.9**	See APM
Adjusted tax	(16.7)	(15.8)	At effective tax rate - see note 6
Adjusted operating profit inc JV after tax	**59.3**	**49.1**	

Adjusted operating profit inc JVs exc impact of IFRS 16 adoption after tax	**2020 £m**	**2019 £m**	**Reference**
Adjusted operating profit inc JV exc impact of IFRS 16 adoption	**75.3**	**64.9**	See APM
Adjusted tax	(16.6)	(15.8)	At effective tax rate – see note 6
Adjusted operating profit inc JV exc impact of IFRS 16 adoption after tax	**58.7**	**49.1**	

Adjusted profit inc JVs before tax **Adjusted profit inc JVs after tax**	**2020 £m**	**2019 £m**	**Reference**
Adjusted operating profit inc JVs	**76.0**	**64.9**	See APM
Less net finance costs	(5.0)	(3.9)	Note 4 – Net Finance Costs
Adjusted profit inc JVs before tax	**71.0**	**61.0**	
Adjusted tax	(15.6)	(14.8)	Note 6 - Earnings per share
Adjusted profit inc JVs after tax	**55.4**	**46.2**	

	2020		2019		
Adjusted effective tax £m/rate	**£m**	**%**	**£m**	**%**	**Reference**
Adjusted effective tax £m/rate	**15.6**	**22.0**	**14.8**	**24.3**	Note 6 - Earnings per share
Exceptional items	(4.5)	(23.4)	(3.9)	(17.9)	
Share-based payment expense	(1.1)	(19.0)	(0.5)	(16.7)	
Amortisation of acquired intangible assets	(1.8)	(21.2)	(2.1)	(22.1)	
Net IAS 41 valuation movement on biological assets	4.7	29.7	(3.3)	(22.4)	
Net IAS 41 valuation movement on biological assets in JVs	-	-	(0.4)	(36.4)	
Effective tax £m/rate	**12.9**	**24.0**	4.6	**40.7**	Note 5 – Income tax expense

Adjusted Basic Earnings per share	**2020**	**2019**	**Reference**
Adjusted profit after tax (£m)	**55.4**	**46.2**	See APM
Weighted average number of ordinary shares (m)	64.908	63.141	Note 6 - Earnings per share

Adjusted Earnings per share (pence)	**85.4**	**73.2**	

Adjusted Diluted Earnings per share	2020	2019	Reference
Adjusted profit inc JVs after tax (£m)	**55.4**	**46.2**	See APM
Weighted average number of diluted ordinary shares (m)	65.427	65.304	Note 6 - Earnings per share
Adjusted Earnings per share (pence)	**84.7**	**70.7**	

	2020		2019		Reference
Adjusted Earnings cover	**Pence**	**Times**	**Pence**	**Times**	
Adjusted Earnings per share	**85.4**		**73.2**		See APM
Dividend for the year	**29.1**		**27.7**		Note 7 - Dividends
Adjusted Earnings cover		**2.9**		**2.6**	

	2020		2019		
Adjusted EBITDA - as calculated under our financing facilities	**£m**	**£m**	**£m**	**£m**	**Reference**
Adjusted operating profit exc JVs	65.3		57.7		Group Income Statement
Lesser of JV income or cash received from JVs	3.7		3.4		Group Statement of Cash Flows
Depreciation:- Property, plant & equipment owned assets	13.1		12.6		Note 11 - Property, Plant & Equipment
Depreciation:- historical cost of biological assets	11.0		9.6		See Financial Review
Amortisation and impairment (excluding separately identified acquired intangible assets)	5.1		5.4		Note 9 - Intangible Assets
Less amounts attributable to non-controlling interest	(0.6)		(0.4)		Group Income Statement
Adjusted EBITDA - as calculated under our financing facilities		**97.6**		**88.3**	

	2020		2019		
Adjusted EBITDA – as calculated under our financing facilities	**£m**	**£m**	**£m**	**£m**	**Reference**
Operating Profit		**47.6**		**8.7**	Group Income Statement
Add back:					
Net IAS 41 valuation movement on biological assets	(15.8)		14.7		Group Income Statement
Amortisation of acquired intangible assets	8.5		9.5		Group Income Statement
Share-based payment expense	5.8		3.0		Group Income Statement
Exceptional items	19.2		21.8		Group Income Statement
Adjusted operating profit exc JVs	65.3		57.7		Group Income Statement
Adjust for:					
Cash received from JVs (dividend and loan repayment)	3.7		3.4		Group Statement of Cash Flows
Depreciation:- Property, plant & equipment owned assets	13.1		12.6		Note 11 - Property, Plant & Equipment
Depreciation:- historical cost of biological assets	11.0		9.4		See financial review
Amortisation and impairment (excluding separately identified acquired intangible assets)	5.1		5.4		Note 9- Intangible Assets
Less amounts attributable to non-controlling interest	(0.6)		(0.4)		Group Income Statement
Adjusted EBITDA - as calculated under our financing facilities		**97.6**		**88.1**	

Balance Sheet Measures

Net Debt **Net Debt exc impact of IFRS 16 adoption** **Net debt as calculated under our financing facilities**	**2020** **£m**	**2019** **£m**	**Reference**
Unsecured bank loans and overdrafts	112.8	104.0	Group Balance Sheet
Obligations under finance leases	31.1	6.1	Group Balance Sheet
Total debt financing	143.9	110.1	Note 14 - Notes to the cash flow statement
Deduct:-			
Cash and cash equivalents	(41.3)	(30.5)	Group Balance Sheet
Net Debt	**102.6**	**79.6**	
Deduct:-			
Impact of IFRS 16 adoption	(24.7)	-	No direct reference
Net Debt exc impact of IFRS 16 adoption	**77.9**	**79.6**	
Add back:- Guarantees	5.9	4.0	Note 15 – Contingencies and Bank guarantees
Deferred purchase arrangements	0.2	1.3	No direct reference
Net Debt - as calculated under our financing facilities	**84.0**	**84.9**	

Cashflow Measures

Cash conversion	2020 £m	£m	2019 £m	£m	Reference
Cash generated by operations		**82.9**		**48.4**	Note 14 - Notes to the cash flow statement
Operating Profit	47.6		8.7		Group Income Statement
Add back:					
Net IAS 41 valuation movement on biological assets	(15.8)		14.7		Group Income Statement
Amortisation of acquired intangible assets	8.5		9.5		Group Income Statement
Share-based payment expense	5.8		3.0		Group Income Statement
Exceptional items	19.2		21.8		Group Income Statement
Adjusted operating profit exc JVs		**65.3**		**57.7**	Group Income Statement
Cash Conversion (%)		**127%**		**84%**	

Cash conversion exc impact of IFRS 16 adoption	2020 £m	2019 £m	Reference
Cash generated by operations	**82.9**	**48.4**	Note 14 - Notes to the cash flow statement
Deduct Impact of IFRS 16 adoption	(7.6)	-	Note 1 – Reporting Entity
Cash generated by operations exc impact of IFRS 16 adoption	**75.3**	**48.4**	
Adjusted operating profit exc JVs	**65.3**	**57.7**	Group Income Statement
Cash Conversion exc impact of IFRS 16 adoption (%)	**115%**	**84%**	

Free cashflow	2020 £m	2019 £m	Reference
Cash generated by operations	82.9	48.4	Note 14 - Notes to cashflow statement
Interest and tax paid	(17.1)	(15.0)	Note 14 - Notes to cashflow statement
Capital expenditure	(35.4)	(28.3)	Group Statement of Cashflows
Cash received from JV (dividends and loan repayment)	3.7	3.4	Group Statement of Cashflows
Other	1.1	1.5	Group Statement of Cashflows
Free cashflow	**35.2**	**10.0**	

Other Measures

Interest cover	2020 £m	Times	2019 £m	Times	Reference
Finance costs	5.3		4.7		Group Income Statement
Finance income	(0.3)		(0.8)		Group Income Statement
Net finance costs	5.0		3.9		Note 4 - Net Finance Costs
Deduct:-					
Pension interest	(0.4)		(0.9)		Note 4 - Net Finance Costs
Additional interest from adopting IFRS 16	(0.7)		-		Note 4 - Net Finance Costs
Unwinding of discount on put options	(0.5)		-		Note 4 - Net Finance Costs
Amortisation of refinancing fees	(0.4)		(0.4)		Note 4 - Net Finance Costs
Adjusted net finance costs	**3.0**		**2.6**		
Adjusted EBITDA - as calculated under our financing facilities	**97.6**		**88.1**		See APM
Interest cover		**32**		**34**	

Ratio of net debt to Adjusted EBITDA	2020 £m	Times	2019 £m	Times	Reference
Net Debt - as calculated under our financing facilities	**84.0**		**84.9**		See APM
Adjusted EBITDA - as calculated under our financing facilities	**97.6**		**88.1**		See APM
Ratio of net debt to Adjusted EBITDA		**0.9**		**1**	

Return on adjusted invested capital	2020 £m	%	2019 £m	%	Reference
Adjusted operating profit inc. JVs after tax	**59.3**		**49.1**		See APM
Equity attributable to owners of the company	508.8		488.4		Group Balance Sheet
Add back:					
Net debt	102.6		79.6		Note 14 - Notes to the cash flow statement
Pension liability	18.1		24.2		Group Balance Sheet
Related deferred tax	(3.5)		(4.4)		No direct reference
Deduct:					
Biological assets - carrying value	(370.2)		(346.2)		See financial review
Biological assets - historic cost	57.5		58.2		See financial review
Goodwill	(105.6)		(106.3)		Group Balance Sheet
Related deferred tax	74.4		66.6		No direct reference
Adjusted invested capital	**282.1**		**260.1**		
Return on adjusted invested capital		**21.0%**		**18.9%**	

Return on adjusted invested capital exc impact of IFRS 16 adoption	2020 £m	%	2019 £m	%	Reference
Adjusted operating profit inc JVs exc impact of IFRS 16 adoption after tax	**58.7**		**49.1**		
Equity attributable to owners of the company	508.8		488.4		Group Balance Sheet
Add back:					
Net debt (excluding IFRS 16 leases)	77.9		79.6		
Pension liability	18.1		24.2		Group Balance Sheet
Related deferred tax	(3.5)		(4.4)		No direct reference
Deduct:					
Biological assets - carrying value	(370.2)		(346.2)		See financial review
Biological assets - historic cost	57.5		58.2		See financial review
Goodwill	(105.6)		(106.3)		Group Balance Sheet
Related deferred tax	74.4		66.6		No direct reference
Adjusted invested capital	**257.4**		**260.1**		
Return on adjusted invested capital exc impact of IFRS 16 adoption		**22.8%**		**18.9%**	

Return on adjusted invested capital	2020 £m	%	2019 £m	%	Reference
Return on adjusted invested capital		**21.0%**		**18.9%**	See APM
Adjusted operating profit inc JVs after tax	59.3		49.1		
Tax rate	16.7	22.0%	15.8	24.3%	Note 6 - Earnings Per Share
Adjusted operating profit including joint ventures	76.0		64.9		Group Income Statement
Adjusted operating profit attributable to non-controlling interest	0.6		0.4		Group Income Statement
Pre-tax share of profits from joint ventures excl net IAS41 valuation movement	(11.3)		(7.6)		Group Income Statement
Adjusted operating profit exc JVs	65.3		57.7		Group Income Statement
Fair value movement on biological assets	15.8		(14.7)		Group Income Statement
Amortisation of acquired intangibles	(8.5)		(9.5)		Group Income Statement
Share-based payment expense	(5.8)		(3.0)		Group Income Statement
Exceptional items	(19.2)		(21.8)		Group Income Statement
Share of post-tax profit of joint venture	8.9		5.1		Group Income Statement
Net Finance costs	(5.0)		(3.9)		Group Income Statement
Profit before tax	51.5		9.9		Group Income Statement
Tax	(10.6)		(3.2)		Group Income Statement
Profit	**40.9**		**6.7**		Group Income Statement
Equity attributable to owners of the company	**508.8**		**488.4**		Group Balance Sheet
Return on Invested Capital		**8.0%**		**1.4%**	