



For Immediate Release

6 September 2018

Genus plc
(‘Genus’, the ‘Company’ or the ‘Group’)
PRELIMINARY RESULTS FOR THE YEAR ENDED 30 JUNE 2018
STRONG STRATEGIC AND FINANCIAL PROGRESS

Genus, a leading global animal genetics company, announces its preliminary results for the year ended 30 June 2018.

Year ended 30 June	Actual currency			Constant
	2018	2017	Movement	currency **
Adjusted results*	£m	£m	%	%
Revenue	470.3	459.1	2	6
Operating profit inc JVs exc gene editing	68.1	63.6	7	12
Operating profit inc JVs	63.1	60.1	5	10
Profit before tax	58.5	56.4	4	9
Basic earnings per share (pence)	75.9	69.4	9	15
Statutory results				
Revenue	470.3	459.1	2	
Operating profit	8.2	38.2	(79)	
Profit before tax	7.8	40.7	(81)	
Profit after tax	41.6	34.3	21	
Basic earnings per share (pence)	69.7	53.8	30	
Dividend per share (pence)	26.0	23.6	10	

* Adjusted results are before net IAS 41 valuation movement on biological assets, amortisation of acquired intangible assets, share-based payment expense and exceptional items. Adjusted results are the alternative performance measures used by the Board to monitor underlying performance at a Group and operating segment level. They are consistently applied throughout. See note 1 to these accounts for further information.

** Constant currency percentage movements are calculated by restating the results for the year ended 30 June 2018 at the average exchange rates applied to adjusted operating profit for the year ended 30 June 2017.

2018 Highlights

- 2018 was another year of positive financial progress as Genus continued to execute its strategy successfully

Financial Highlights

- Revenue of £470.3m increased 2% (6% in constant currency) with strong bovine revenues, up 8% (11% in constant currency), primarily from strong sexed semen sales, while porcine revenues were 1% lower (up 3% in constant currency)
- Adjusted profit before tax up 4% to £58.5m (up 9% in constant currency), with a strong performance in Genus ABS, up 29% in constant currency, and continued growth of 5% in PIC in constant currency. Adjusted operating profit including joint ventures improved 10% in constant currency, or 12% before increased gene editing spending
- Record adjusted basic earnings per share up 9% to 75.9p (up 15% in constant currency)
- Statutory profit before tax down 81% to £7.8m, due principally to a reduction in the non-cash fair value of biological assets, however, statutory profit after tax increased by 21% to £41.6m as a result of non-cash deferred tax credits related to biological assets arising from US tax reforms
- Statutory basic earnings per share up 30% to 69.7p, reflecting the biological asset reduction and non-cash deferred tax credits mentioned above
- Solid free cash flow¹ of £24.3m (2017: £25.4m), achieved alongside significant capital investments for long-term growth, with strong cash conversion² of 101% (2017: 84%), while cash inflows from joint ventures were lower at £2.8m (2017: £8.3m) following a very strong prior year
- Net debt to EBITDA of 1.4x (2017: 1.5x), with net debt at 30 June 2018 of £108.5m (2017: £111.6m) after acquisitions and investments of £1.8m (2017: £30.0m)
- Reflecting the Board's continuing confidence in the Group's prospects, it is recommending a final dividend of 17.9p per share, to give a total dividend of 26.0p per share, up 10% and well covered by adjusted earnings at 2.9 times (2017: 2.9 times)

Operational Highlights³

- Continued operating profit growth of 5% in PIC on volumes up 8% and royalty revenues up 10%
 - Strong profit growth in Europe of almost 50% and Latin America of 17%
 - Achieved encouraging first year results from the Hermitage acquisition and partnership
 - Strong volume growth of 19% in Asia, though profit growth tempered, as expected, by lower pig prices in China
 - Entered into a strategic relationship with Møllevang, a leading Danish porcine genetics company, on 2 July 2018 to distribute elite genetics in the important Danish market
- ABS achieved profit growth of 29%, with revenue and volume growth in all regions, following the launch of Sexcel[®], ABS's proprietary, innovative sexed genetics product⁴
 - Overall volumes up 5%, with sexed volumes up 25% on strong demand for Sexcel with sales ahead of expectations
 - Beef volumes up 8% with successful launch of proprietary NuEra[®] beef genetics and increased use of beef genetics in dairy herds

- IVB continued to grow its presence with large accounts achieving 20% volumes increase
- Third-party IntelliGen® contracts secured in Europe and India
- Research and Development investment increased by 13% as planned as key initiatives in gene editing, biosystems engineering and genomic selection made significant progress
 - Pregnancies established to expand the population of gene edited pigs from matings of the first batches of founder generation animals born under the PRRSv development programme⁵. First patents issued and continued positive regulatory engagement
 - IntelliGen technology successfully commercialised globally to support ABS Sexcel and third-party customers wanting to use a 21st Century sexing technology
 - Achieved a leadership position in the dairy Holstein breed with 37 of the top 100 genomic bulls in the US\$ Net Merit rankings, driven by the success of De Novo

Commenting, Karim Bitar, Chief Executive said:

“Genus performed strongly in 2018, achieving our financial objectives and making good strategic progress. ABS growth was particularly strong, alongside another good year for PIC.

“The successful launch of Sexcel, our innovative proprietary 21st century sexed semen product in September 2017, was a real highlight after many years of pioneering development. It was very pleasing to hear from dairy farmers how the product performance is exceeding their expectations. The commencement of the strategic partnership with Møllevang in July 2018 will further strengthen and bring new opportunities to our PIC business.

“In the short term, the external environment for many of our customers is challenging due to trade disputes and the recent spread of African Swine Fever to China. Notwithstanding this, we see continuing opportunities for growth. Reflecting the Board’s continuing confidence in the Group’s prospects we are recommending a 10% increase in the dividend.”

An analyst meeting will be held at 8.30am today at Buchanan’s offices (107 Cheapside, London EC2V 6DN).

A live webcast will be available to those unable to attend this meeting in person. If you would like to connect to the webcast, please log onto the following web address approximately 10 minutes before 8.30am: <http://webcasting.buchanan.uk.com/broadcast/5b6c001249f1e90e1690296f>

This announcement is available on the Genus website, www.genusplc.com.

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Karim Bitar, Chief Executive

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¹ Free cash flow is before debt repayments, acquisitions, investments and dividends.

² Cash conversion is the cash generated by operations £58.3m (2017: £46.3m) divided by adjusted operating profit from continuing operations £57.7m (2017: £55.1m).

³ Based on adjusted results including joint venture income, less non-controlling interest in constant currency.

⁴ Sexcel is the ABS brand of sexed genetics produced with its proprietary 21st Century IntelliGen technology.

⁵ The PRRSv programme refers to our development-phase gene editing programme to confer resistance to pigs to Porcine Reproductive and Respiratory Syndrome virus.

About Genus

Genus creates advances to 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 seventy-five 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 use these to supply the global dairy and meat supply chains.

The Group's competitive edge has been created 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.

With headquarters in Basingstoke, United Kingdom, Genus companies operate in over twenty-five countries on six continents, with research laboratories located in Madison, Wisconsin, USA.

Chief Executive's Review

2018 was another strong year for Genus, as the Group made substantial positive progress implementing its strategy and achieved a good financial performance. The launch of Sexcel, our innovative and proprietary bovine sexed genetics product, and the start of sales of our IntelliGen technology to third parties, were particular highlights of the year.

Group Performance

The Group performed positively, with results in line with our expectations. Revenue and adjusted profit before tax rose by 6% and 9% respectively, in constant currency terms. Our medium-term target is to generate double-digit compound growth in adjusted operating profit, in constant currency and excluding gene editing costs. Our growth in this key measure was 12% in 2018.

Currency movements presented a modest headwind. Revenue in actual currency rose by 2% and adjusted profit before tax was 4% higher.

Genus PIC delivered another robust performance, with adjusted operating profit including joint ventures increasing by 5% in constant currency. PIC benefited from growth in Europe, both organically and through last year's acquisition and partnership with Hermitage, and higher profits in Latin America. Profits in Asia were stable, as growth in genetic sales was offset by reduced farm margins in China, after exceptionally high pig prices in the prior year. Performance in North America showed modest growth, despite the impact of PRRSv infections in the second half of the year at some of the Group's farms, which have now been eradicated.

Genus ABS rebounded strongly in 2018, following the successful launch of Sexcel in September 2017 and actions taken last year to sharpen execution. ABS Dairy had a strong year, while ABS Beef made encouraging progress in its strategic initiatives. Overall, Genus ABS increased adjusted operating profits including non-controlling interest by 29% in constant currency, with growth being strongest in Europe and Asia while profits in North America reduced, as we invested in our key account sales force.

As planned we continued to increase Group investment in R&D, which is delivering strong rates of genetic gain and generating a robust product pipeline. In total, R&D investment rose by 13% in constant currency. This included further growth in the gene editing expense, as we continue to advance the PRRSv resistance programme.

Strategic Progress

Genus successfully implemented a number of important strategic developments during the year. In porcine, we formed a strategic partnership with Møllevang, one of Denmark's leading pig-breeding companies. This became effective on 2 July 2018 and will see us combine our complementary supply chains, sales and marketing infrastructure and genetics. We will strengthen the PIC product offering by increasing genetic diversity along with offering customers globally superior genetics and service. Lastly, producers in Denmark will have access to PIC products and global technical services team, and will benefit from PIC's leadership in genetic improvement.

In Dairy, our majority owned De Novo Genetics joint venture delivered 54% of our Holstein bulls which came into production this year, up from 23% in 2017, enabling us to create our industry leading pipeline of young bulls. Sexcel was successfully launched, with sales ahead of our expectations. Sexcel is delivering a great on-farm experience, with materially better conception rates than alternative products. We have also secured third-party technology licensing and supply deals in Norway and India, under the IntelliGen brand. We continue to vigorously defend our position in the US courts against STGenetics ('ST'). We have filed Inter-Partes Reviews at the US Patent and Trademark Office, seeking to revoke six patents ST has asserted against us, and have also filed a Motion to Dismiss and Counterclaims in the Federal Court.

Our PRRSv resistance programme made further progress, with the first batches of elite gene edited piglets born during the year. Along with future batches of successfully edited piglets, they will be the founders of our gene edited herd, which we will monitor and assess for technical and regulatory purposes. In addition, US and European patent grants have strengthened our ability to protect our intellectual property.

We commenced some important investments during the year in the Group's infrastructure which will position us well for the long-term. Genus One is a programme to replace our multiple existing dated business systems over the next three years with a single global modern enterprise system. In addition, in June 2018 we were able to secure land in Wisconsin to meet our requirements for long-term bull housing, which will be built out over the next several years.

People

Genus depends on the skills, talents and dedication of its people and I want to thank all of my colleagues around the world for their contribution to another successful year.

Toward the end of 2017, we ran our third global employee engagement survey, achieving a record response rate. The survey showed that our people are highly engaged, with a strong understanding of our vision, strategy, values and our role in pioneering animal genetic improvement. The survey also helped us identify a number of areas for continuous improvement in our communication and people management.

Outlook

The Group's established business model, global market position and product strength, together with our proven strategy based on delivering value to customers through innovation, position Genus well to achieve its medium term growth objective. In the short term, Genus's customers face a more challenging external environment due to growing barriers to international trade and the recent spread of African Swine Fever to China. Notwithstanding this uncertainty, Genus anticipates further financial and strategic progress in 2019.

Karim Bitar

Chief Executive

5 September 2018

Financial and Operating Review

Financial Review

In the year ended 30 June 2018, Genus achieved a good financial performance which was in line with our objectives. Constant currency revenue growth was 6% (2% in actual currency) and adjusted operating profit growth including joint ventures was 10% (5% in actual currency), after increased investment in R&D. Excluding the growth in gene editing costs, adjusted operating profit increased by 12% in constant currency. Adjusted profit before tax and adjusted earnings per share were also up 9% and 15% respectively (4% and 9% in actual currency).

On a statutory basis, profit before tax was 81% lower, primarily due to a lower non-cash IAS 41 valuation of our bovine biological assets. However, statutory earnings per share were 30% higher, boosted by a £32.5m non-cash reduction in Genus's deferred tax liabilities, following tax reforms in the US. These deferred tax liabilities primarily relate to the Group's biological assets. We continue to use adjusted results as our primary measures of financial performance, as they better reflect our underlying progress.

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 £3.0m or 5% compared with 2017. Unless stated otherwise, the financial and operating reviews quote constant currency adjusted growth rates.

	Actual currency			Constant currency
	2018	2017	Movement	Movement
Adjusted Profit Before Tax*	£m	£m	%	%
Genus PIC	94.8	94.8	-	5
Genus ABS	26.1	21.3	23	29
R&D	(46.8)	(43.8)	(7)	(13)
Central costs	(11.0)	(12.2)	10	6
Adjusted operating profit inc JV	63.1	60.1	5	10
Net finance costs	(4.6)	(3.7)	(24)	(24)
Adjusted profit before tax	58.5	56.4	4	9

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

Revenue

Revenue increased by 2% in actual currency and 6% in constant currency to £470.3m (2017: £459.1m). In Genus PIC, revenue growth of 3% in constant currency (1% down in actual currency) was supported by strong royalty revenue growth of 10%, with growth in all regions and Asia up 31% and Europe up 32%, while by-product revenues were lower as market pig prices reduced in China following exceptionally high pig prices in the prior year and we exited certain non-strategic farms. In Genus ABS, revenues grew 11%

in constant currency (8% in actual currency) with all regions making a positive contribution. This included double-digit growth in Europe, Asia and IVB, and sexed product revenue growth of 27%, following strong uptake of Sexcel, our high-fertility sexed genetic product launched early in the year.

Adjusted Operating Profit Including Joint Ventures

Adjusted operating profit including joint ventures was £63.1m (2017: £60.1m), up 5% in actual currency and 10% in constant currency. Within this, Genus's share of adjusted joint venture operating profits was lower at £6.2m (2017: £7.1m) and, following the acquisition of the remaining 49% of IVB in March 2017, amounts attributable to non-controlling interests reduced to £0.8m (2017: £2.1m). Our gene editing investment, which is focused on creating resistance in pigs against PRRSv, a devastating disease for the industry, increased to £5.0m (2017: £3.5m). Excluding this investment, adjusted operating profit increased by 12% in constant currency.

Genus PIC had another solid year, with adjusted operating profit including joint ventures up 5%. Volume growth of 8% included double digit growth in Latin America, Europe and Asia. The European business transformation is continuing to drive strong results and the recently completed strategic relationship with Møllevang, one of Denmark's leading pig-breeding companies, will continue this momentum.

Genus ABS had a strong year. Adjusted operating profit less non-controlling interest increased 29%, with volume growth of 5%. The launch of Sexcel in September 2017 helped to fuel strong sexed volume growth of 25%, along with higher prices and at lower production costs than its predecessor. Double-digit growth in Europe was driven by strong performances in Italy, France and Ireland and also in our beef-on-dairy offering, where the differentiated value of our beef genetics supported prices. Asia also performed strongly, up 36%, with all countries growing. North American volumes were up 2% and we invested to strengthen the focus on key account management. IVB also continued to grow, with embryo volumes up 20%.

R&D costs increased by 13%, as planned, primarily from a 46% increase in gene editing as we develop our first batches of gene edited elite pigs. Bovine product development also increased by 18%, with the start of amortisation of previously capitalised IntelliGen development costs and the continued development of the platform.

Net Finance Costs

Net finance costs increased to £4.6m (2017: £3.7m) due to higher average borrowings and lower interest income following the investments made in the prior year, including the acquisitions of Hermitage for £15.2m and the remaining 49% of IVB for £11.4m.

Exceptional Items

There was a £5.9m net exceptional expense in 2018 (2017: £2.5m), which included £5.0m for legal fees related to Genus ABS's litigation with ST, £1.2m for acquisition and integration related expenses, primarily relating to Møllevang and Hermitage, and other items totalling a credit of £0.3m. The prior year contained an exceptional credit of £5.7m in respect of the arrangements for National Milk Records plc ('NMR') exiting the Milk Pension Fund in June 2017.

Statutory Profit Before Tax

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

	2018	2017
	£m	£m
Adjusted Profit Before Tax	58.5	56.4
Operating profit attributable to non-controlling interest	0.8	2.1
Net IAS 41 valuation movement on biological assets in JVs and associates	(0.5)	0.5
Tax on JVs and associates	(1.5)	(1.4)
Adjusting items:		
Net IAS 41 valuation movement on biological assets	(28.7)	(1.1)
Amortisation of acquired intangible assets	(9.5)	(8.7)
Share-based payment expense	(5.4)	(4.6)
Exceptional items	(5.9)	(2.5)
Statutory Profit Before Tax	7.8	40.7

Our statutory profit before tax was £7.8m (2017: £40.7m), with the decline primarily due to a non-cash fair value reduction of £28.7m (2017: £1.1m) in the net IAS 41 biological asset movement. Within this, there was a £5.3m (2017: £27.4m) uplift in porcine biological assets offset by a £34.0m (2017: £28.5m) reduction in bovine biological assets, due to the continuing trend towards sales of genomic semen and current estimates of the proportion of the semen sales price attributable to the biological asset value. Also impacting statutory profit was amortisation of acquired intangible assets of £9.5m (2017: £8.7m) and share-based payment expense of £5.4m (2017: £4.6m). These items tend to be non-cash, can be volatile and do not correlate to the underlying trading performance in the period.

Taxation

The effective rate of tax for the year, based on adjusted profit before tax, was 20.5% (2017: 25.0%) benefiting from a £2.4m credit from the reduction of deferred tax liabilities in the US following the enactment of US tax reforms. Excluding this one-off credit, the underlying tax rate on adjusted profits would have been 24.6%, reflecting a higher mix of profits in lower tax jurisdictions compared with the prior year. The effective rate remains higher than the UK corporate tax rate due to the mix of overseas profits, particularly the proportion of profits generated in the US and Latin America, and the impact of withholding taxes on the repatriation of funds to the UK. These effects are partly mitigated by the availability of manufacturing relief, R&D credits and agricultural reliefs in certain jurisdictions.

The tax rate on statutory profits was a credit of 347% (2017: 18.5% charge), reflecting a large non-cash deferred tax credit of £32.5m as a result of US tax reform. This primarily arose on applying the new US tax rates to the deferred tax liabilities associated with the fair value uplift under IAS 41 on the Group's biological assets.

Earnings Per Share

Adjusted basic earnings per share increased by 9% to 75.9 pence (2017: 69.4 pence) and were up 15% in constant currency. Basic earnings per share on a statutory basis were 69.7 pence (2017: 53.8 pence), up 30%, with the non-cash fair value accounting reduction in bovine biological assets more than offset by non-cash deferred tax credits arising from the US tax reforms.

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 2018, the carrying value of biological assets was £363.0m (2017: £375.3m), as set out in the table below:

	2018	2017
	£m	£m
Non-current assets	305.8	309.3
Current assets	37.0	43.8
Inventory	20.2	22.2
	363.0	375.3
Represented by:		
Porcine	238.8	215.6
Dairy and beef	124.2	159.7
	363.0	375.3

The movement in the overall balance sheet carrying value of biological assets, excluding the effect of exchange rate translation decreases of £8.8m, includes:

- a £27.6m increase in the carrying value of porcine biological assets, due principally to accounting for the genetics acquired under the strategic relationship with Møllevang, as all material conditions for completion of the transaction under the terms of the subscription agreement were fulfilled at the balance sheet date; and
- a £31.1m reduction in the bovine biological assets value, due to the continuing trend towards sales of genomic semen, resulting in shorter productive lives of bulls, and current estimates, based on market data, of the proportion of the semen sales price attributable to the biological asset value.

The historical cost of these assets, less depreciation, was £51.0m at 30 June 2018 (2017: £51.5m), which is the basis used for the adjusted results. The historical cost depreciation of these assets included in adjusted results was £6.4m (2017: £7.0m).

Retirement Benefit Obligations

The Group's retirement benefit obligations at 30 June 2018, calculated in accordance with IAS 19 and IFRIC 14, were £33.9m (2017: £40.9m) before tax and £27.9m (2017: £32.4m) net of related deferred tax. The largest element of this liability relates to the multi-employer Milk Pension Fund, where we account for this scheme on the basis of Genus being responsible for 86% of the scheme since the exit of NMR (2017: 85%).

During the year, contributions payable in respect of the Group's defined benefit schemes amounted to £7.3m (2017: £7.2m).

Cash Flow

Free cash flow was solid at £24.3m (2017: £25.4m), driven by strong cash generated by operations of £58.3m (2017: £46.3m), representing conversion of adjusted operating profit of £57.7m (2017: £55.1m) into cash of 101% (2017: 84%). Cash inflows from joint ventures were lower at £2.8m (2017: £8.3m) following a very strong prior year.

Capital expenditure cash flows of £22.5m (2017: £18.9m) included continued investment in IntelliGen machines as we ramped up production capacity, an initial payment for the purchase of land to house future North America production facilities for the ABS business and the first stage of the Genus One new enterprise system.

The cash outflow from investments was £1.8m, primarily relating to deferred consideration for previously acquired businesses. This compares to £30.0m in 2017 from the acquisition of De Novo Genetics, Hermitage Genetics and the purchase of the remaining 49% of IVB. The total cash inflow for the year after these investments and dividends was £7.6m (2017: outflow £18.1m).

	2018	2017
	£m	£m
Cash flow (before debt repayments)		
Cash generated by operations	58.3	46.3
Interest and tax paid	(15.1)	(11.7)
Capital expenditure	(22.5)	(18.9)
Cash received from JVs	2.8	8.3
Other	0.8	1.4
Free cash flow	24.3	25.4
Acquisitions and investments	(1.8)	(30.0)
Dividends	(14.9)	(13.5)
Net cash flow	7.6	(18.1)

Net Debt

Net debt decreased from £111.6m to £108.5m at 30 June 2018, with increased capital investment in the business being more than offset by strong cash generation. During the year, we exercised an accordion feature in our credit facilities to increase them by £20.0m, in anticipation of payments to Møllevang in July 2018. At the end of June 2018, there was substantial headroom of £99.3m under the extended facilities of £220.0m.

The Group's financial position and borrowing ratios remain strong, with interest cover remaining at 25 times (2017: 37 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 1.4 times (2017: 1.5 times) with net debt slightly lower and an increased EBITDA.

Return on Invested Capital

We measure our return on 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 invested capital increased to 23.9% after tax (2017: 19.9%), reflecting the increase in adjusted profit and lower tax rate in the year.

Dividend

Reflecting the Board's continuing confidence in the Group's prospects, it is recommending to shareholders a final dividend of 17.9 pence per ordinary share, resulting in a total dividend for the year of 26.0 pence per ordinary share, an increase of 10% for the year. Dividend cover from adjusted earnings remains consistently strong at 2.9 times (2017: 2.9 times).

It is proposed that the final dividend will be paid on 30 November 2018 to the shareholders on the register at the close of business on 16 November 2018.

Stephen Wilson

Group Finance Director

5 September 2018

Review of Operations

Genus PIC – Operating Review

	Actual currency			Constant
	2018	2017	Movement	currency
	£m	£m	%	Movement
				%
Revenue	247.7	249.5	(1)	3
Adjusted operating profit exc JV	88.7	87.7	1	6
Adjusted operating profit inc JV	94.8	94.8	-	5
Adjusted operating margin exc JV	35.8%	35.2%	0.6pts	1.0pts

Market

Sustained global economic growth in the year under review supported strong demand for pork and expansion of international trade, with global consumption increasing by 2%. With this positive backdrop, producers started the year in an expansionary mode in key markets such as the US, Europe and China. However, over the course of the year, record pork production along with variable input costs, trade disruptions, and disease risks resulted in heightened price volatility and uncertainty.

In response to the expansion of major producers, pig prices in China declined sharply throughout the year, although over more recent months a recovery has begun. Meanwhile, in the United States, pig inventories surpassed 73 million head for the first time, as new processing facilities were brought on-line. Prices in the US ended June 2018 5% lower than in the prior year and have fallen substantially further since then. EU production also grew due to increasing productivity and a 1.4% increase in its breeding herd, causing prices to soften 15% through 2018. Brazil was poised for a comeback after a volatile FY17, but increasing feed costs eroded margins and a transportation strike temporarily halted processing at abattoirs.

Political global trade disruptions also added increasing uncertainty for PIC's customers. Russia imposed an embargo on Brazilian pork in the autumn of 2017. In 2018, both China and Mexico enacted tariff schedules for US pork products, in response to US-imposed steel and aluminium import taxes. This resulted in significant falls in US pig futures prices, and along with growing production already in the pipeline, puts US producers in a situation of significant uncertainty for the coming year. In addition, African Swine Fever has been detected in China for the first time in August 2018, which could have substantial effects on the pig industry there and on global trade if eradication efforts are not successful.

The porcine genetics market saw significant change, with Danbred, a top-three global competitor, breaking up into competing groups of breeders. Following this, PIC announced it had agreed to enter into a strategic relationship with Møllevang from July 2018.

Performance

Genus PIC achieved another good performance, with operating profit including joint ventures of £94.8m, up 5% in constant currency. Volumes grew by 8% and revenue was 3% higher, primarily due to 10% higher royalty revenues, partially offset by lower slaughter prices in China on by-product animals and the exit from some non-strategic farms in Europe and Latin America.

In North America, revenue grew 1% in constant currency, driven by royalty growth of 3%. Health breaks in PIC multiplication farms and customer farms, along with PIC's continued investments in expanding the supply chain and upgrading company-owned facilities, restricted North America's profit growth to 1% during the period.

Latin American profits improved by 17%, volumes improved 10% and revenues in constant currency was up 11%, with growth in all regions. A key contributor to this growth was royalty revenue, which increased by 15%. Profit performance from PIC's joint venture in Brazil was up by 14% in constant currency.

Europe achieved impressive growth, with volumes up 15%, royalty revenues up 32% and constant currency profits up 48%, driven by customer wins and strategic pricing initiatives. The integration of the Hermitage key accounts and distribution partnership also contributed positively to growth in Europe which was in line with our expectations. The integration of PIC's strategic relationship with Møllevang and further synergies from the partnership with Hermitage will contribute to further growth for PIC Europe going forward.

Asia's profits were 1% higher in constant currency compared with 2017, with strong growth in most countries, driven by volume growth of 19% and royalty revenue growth of 31% in the region. However, China experienced weakening market prices for by-product pigs and biosecurity challenges in the supply chain. This resulted in China's profits being 15% lower against a strong prior year, despite growth being achieved in royalties (+29%), volumes (+44%) and breeding stock profits (+24%). PIC's strategy to focus on key large-scale customers in emerging markets, while mitigating operational risks, continues to position PIC in the Asia region for good long-term prospects.

Overall, PIC delivered good results, despite varying global market conditions and continued investment to enhance product supply and differentiation. PIC's long-term global business model and strategic relationships such as those with Hermitage and Møllevang, will enable PIC to continue to better serve customers, mitigate market risks and support future growth through challenging markets.

Genus ABS - Operating Review

	Actual currency			Constant
	2018	2017	Movement	currency
	£m	£m	%	Movement
Revenue	210.6	195.9	8	11
Adjusted operating profit	26.2	22.3	17	23
Adjusted operating profit less non-controlling interest	26.1	21.3	23	29
Adjusted operating margin	12.4%	11.4%	1.0pts	1.2pts

Market

Following robust growth in milk output in the first half of the year, challenging weather conditions in key exporting countries caused growth to slow in the second half, which in the US and Europe, was contrary to market expectations. Increased feed prices also capped growth in milk volumes. China's dairy market continues to grow and influence the global demand for dairy products, with imports increasing in 2018.

Global dairy markets entered the financial year reflecting optimism as nearly all dairy indices had recovered from the previous down cycle. Dairy prices remained strong through the early part of this financial year but fell off as the year progressed, with the US and EU down 8% and 15% respectively since November 2017. Growing tension around trade and tariffs has increased the level of uncertainty for farmers particularly in the US. US beef production continues to be affected by drought conditions in some areas, forcing animals to be placed into feed lots early and potentially affecting consistency of supply into the latter part of 2018. In addition, feed cost increases will not encourage producers to raise heavy animals, which may constrain supply.

Influenced by local market conditions, prices for cattle remain diverse, being up in Brazil, Europe and China, but down in the US, Australia and New Zealand. This volatility is likely to remain affected by seasonality of supply, changing feed prices and the availability of other sources of protein in markets such as Brazil. In addition, the impact of tariffs on the global beef trade is increasing uncertainty for producers.

Continuing consolidation of the global dairy industry and of high-quality breeding herds has also pushed bovine genetics suppliers to consolidate, with it being increasingly important for them to own and control their genetics, as ABS has done through De Novo.

Performance

Performance was strong with operating profits for ABS increasing by 29% in constant currency, on a 5% volume increase and an 11% increase in revenue. Sexed volumes were up 25%, reflecting the successful launch of Sexcel, and sales of inventory produced under the contract with ST, which terminated in August

2017. Increased usage of sexed genetics also led to increased use of beef genetics in dairy herds, supporting an 8% increase in global beef volumes.

In Europe, profits were up 12% in constant currency, with volumes increasing 4% in generally favourable markets for producers. The trend of dairy customers using sexed genetics, coupled with beef genetics for a portion of the herd, continued. As a result, beef volumes increased by 7%, beef selling prices increased by 9%, due to focus on the value of differentiated beef genetics, and sexed semen volumes grew 24%, with strong customer acceptance of Sexcel.

In North America, profits decreased by 17% in constant currency. Volumes were up by 2%, with sexed volumes up 29%, and revenue grew by 5%, but this was offset by planned investment to strengthen the focus on key account management. Beef volumes were up 19% over the prior year, reflecting stable beef market conditions and the use of beef genetics on dairy herds, supported by proprietary NuEra genetics selected for cross-bred beef on dairy performance.

In Latin America, profits were up 4% in constant currency, with conventional dairy volumes increasing 4% and sexed semen 8%. Beef volumes were up 5%, despite challenging market conditions and lower domestic beef consumption in Brazil. NuEra genetics, selected for cross-bred performance of North American sires with tropical cows, proved popular with customers.

In Asia, volumes were up 8% and profits up 36%, with growth across all major countries. Profits were up 242% in Russia, 81% in Australia and 29% in Japan. Asia also successfully launched Sexcel from our Brahma stud in India, to provide elite sexed genetics into the Indian market for the first time, leading to more than 100% profit growth.

IVB grew embryo volumes by 20% and revenues by 24%, however investments to establish new laboratories held back profit growth to 8% including non-controlling interest. IVB was fully integrated into the regional structure of ABS at the end of the period.

Overall, ABS delivered a much improved performance and, with the increasing customer adoption of Sexcel and a leading genetic portfolio, anticipates continued progress.

Research and Development - Operating Review

	Actual currency			Constant currency
	2018	2017	Movement	Movement
	£m	£m	%	%
Porcine product development	17.0	16.6	2	8
Bovine product development	17.2	15.3	12	18
Gene editing	5.0	3.5	43	46
Other research and development	7.6	8.4	(10)	(2)
Net expenditure in R&D less non-controlling interest	46.8	43.8	7	13

Performance

As planned, R&D investment increased by 13% in constant currency to £46.8m, primarily due to the launch of IntelliGen and the development of gene editing initiatives. The Group's R&D investments are expected to continue to increase in 2019 as we continue to execute our strategy of delivering proprietary differentiated products that customers value.

Within porcine product development, the continued implementation of single-step genomic evaluation across all porcine pure line populations, crossbred products and traits resulted in further strong genetic gain. Genus has continued to drive the rate of genetic gain 35% faster compared with the period before the implementation began. During the year, Hermitage was transitioned to PIC genetics and integrated into Genus's programme. The 8% spending growth was a result of expanding genetic testing and product validation and investment to identify unique new traits such as meat tenderness.

Bovine product development expense increased by 18%, primarily due to the start of amortisation of previously capitalised IntelliGen development costs and continued development of the platform. This included work to further increase the performance of the IntelliGen instruments, refine biological processes and ensure continuous improvement in processing and cost performance. In addition, to further expand the IntelliGen footprint globally, Genus continues to drive business development opportunities in technology transfer and external customer service.

The dairy product development effort has continued to benefit from the integration of De Novo Genetics, a majority owned company created in September 2016 with De-Su Holsteins. As a result, Genus substantially improved the quality of its industry leading dairy bull portfolio, while also improving the focus of the operation and reducing costs. Genus continues to grow its genomic database and Real World Data collection and is exploring new proprietary traits. In beef, there was continued investment in building

proprietary differentiated customer products that maximise value in the beef supply chain, through genetic improvement in Genus's beef nucleus herd.

Gene editing expenditure increased by 46% in the year, primarily associated with the porcine PRRSv resistance project and, to a lesser extent, work on investigating bovine respiratory disease. In porcine, Genus worked with RenOVate Biosciences, its co-founded gene editing company, to produce the first-generation gene edited pigs in elite purelines. The population size is now being expanded through matings of these animals, with pregnancies established for the next generation. Genus also advanced its regulatory engagement with the FDA and had patents issued in the US and Europe. Gene editing costs will continue to grow as the number of animals carrying the edit is increased and initial regulatory submissions are prepared.

Industry leading research continued in developing genomic selection approaches to drive genetic improvement and differentiation even faster, along with investments in intellectual property ('IP') creation and protection.

Principal Risks and Uncertainties

Genus supplies biological products to agricultural customers and is exposed to a wide range of risks and uncertainties. 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 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 the principal risks and uncertainties facing Genus and how we manage them.

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

STRATEGIC RISKS

Risk Description	How we manage risk	Risk change in 2018
Developing products with competitive advantage		
<ul style="list-style-type: none">Development programmes fail to produce best genetics for customers.Increased competition to secure elite genetics.	<p>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.</p>	<p>Reduced.</p> <p>No change in porcine but decreased in bovine, due to increased access to elite dairy genetics through the acquisition of De Novo.</p>
Continuing to successfully develop IntelliGen technology		
<ul style="list-style-type: none">Failure to manage the technical, production and financial risks associated with the rapid development of the IntelliGen business.The industry response to the introduction of competition into the sexed semen market.	<p>Our continued development of the technology and its deployment to new markets is supported by dedicated internal resources and agreements with external partners and suppliers. Further patent infringement proceedings initiated by ST in the US in 2017 are being vigorously defended.</p>	<p>Reduced.</p> <p>We successfully launched Sexcel produced with IntelliGen technology and customer acceptance has been strong. We continue to increase IntelliGen's global deployment and have secured third-party customers.</p>

Developing and commercialising gene editing technologies

- | | | |
|--|---|---|
| <ul style="list-style-type: none">• Failure to develop successfully and commercialise gene editing technologies due to technical, IP, market, regulatory or financial barriers.• Competitors secure 'game-changing' technology. | <p>We stay aware of new technology opportunities through a wide network of academic and industry contacts. Our R&D Portfolio Management Team ('R&D PMT') 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.</p> | <p>No change.</p> <p>Key initiatives continue to progress through the R&D life cycle and we maintain the high level of investment needed to bring the end products to market.</p> |
|--|---|---|

Capturing value through acquisitions

- | | | |
|---|--|---|
| <ul style="list-style-type: none">• Failure to identify appropriate investment opportunities or to perform sound due diligence.• Failure to successfully integrate an acquired business. | <p>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.</p> | <p>No change.</p> <p>The acquisition process continues to provide valuable and timely access to investment opportunities. Our experiences with post-acquisition integration provide a platform for integrating newly acquired businesses.</p> |
|---|--|---|

Growing in emerging markets

- | | | |
|--|---|---|
| <ul style="list-style-type: none">• Failure to appropriately develop our business in China and other emerging markets. | <p>We have a robust organisation, blending local and expatriate executives, supported by the global species teams. This allows us to grow our business in key markets, while managing risks and ensuring we comply with our global standards.</p> | <p>Increased.</p> <p>Financial market volatility in certain emerging markets is increasing. In China, trade disputes with the US and the appearance of African Swine Fever increase uncertainty for the pig industry.</p> |
|--|---|---|
-

OPERATIONAL RISKS

Risk Description	How we manage risk	Risk change in 2018
Protecting IP		
<ul style="list-style-type: none"> Failure to protect our IP could mean Genus-developed genetic material, methods, systems and technology become freely available to third parties. 	<p>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.</p>	<p>No change.</p>
Ensuring biosecurity and continuity of supply		
<ul style="list-style-type: none"> 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. Lower demand for our products, due to industry-wide disease outbreaks. 	<p>We have stringent biosecurity standards, with independent reviews throughout the year to ensure compliance and investigate biosecurity incidents, to ensure learning across the organisation. We regularly review the geographical diversity of our production facilities, to avoid over-reliance on single sites.</p>	<p>Increased.</p> <p>We experienced disease outbreak in parts of the PIC supply chain in the US in 2018. We continue to strengthen our bio-security measures to further reduce this inherent risk. In addition, risks to global trade have increased compared with the prior year.</p>
Hiring and retaining talented people		
<ul style="list-style-type: none"> Failure to attract, recruit, develop and retain the global talent needed to deliver our R&D programmes and growth plans in our chosen markets. 	<p>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.</p>	<p>Reduced.</p> <p>We have been largely successful in recruiting and retaining the appropriate skills to meet our business growth plans.</p>

FINANCIAL RISKS

Risk Description	How we manage risk	Risk change in 2018
Managing agricultural market and commodity prices volatility		
<ul style="list-style-type: none">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.	<p>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.</p>	<p>Increased.</p> <p>Agricultural commodities are being targeted with tariffs in escalating global trade disputes. This is increasing price volatility and uncertainty for our customers in several markets around the world.</p>
Funding pensions		
<ul style="list-style-type: none">Exposure to costs associated with failure of third-party members of joint and several liabilities pension scheme.Exposure to costs as a result of external factors (such as mortality rates, interest rates or investment values) affecting the size of the pension deficit.	<p>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 2015 actuarial valuation. In agreement with the employers, the trustees implemented an investment de-risking strategy and have started a liability management exercise. We also monitor the strength of other employers in the fund and have retained external consultants to provide expert advice.</p>	<p>No change.</p> <p>The triennial 2018 fund valuation is currently in progress.</p>

Group Income Statement
For the year ended 30 June 2018

Genus plc

	Note	2018 £m	2017 £m
REVENUE	2	470.3	459.1
ADJUSTED OPERATING PROFIT	2	57.7	55.1
Adjusting items:			
- Net IAS 41 valuation movement on biological assets	9	(28.7)	(1.1)
- Amortisation of acquired intangible assets	8	(9.5)	(8.7)
- Share-based payment expense		(5.4)	(4.6)
		(43.6)	(14.4)
- Exceptional items:	3		
- Litigation		(5.0)	(5.3)
- Acquisition and integration		(1.2)	(0.6)
- Other (including restructuring)		0.3	(2.3)
- Pension related		-	5.7
Total exceptional items		(5.9)	(2.5)
Total adjusting items		(49.5)	(16.9)
OPERATING PROFIT		8.2	38.2
Share of post-tax profit of joint ventures and associates retained		4.2	6.2
Finance costs	4	(4.8)	(4.5)
Finance income	4	0.2	0.8
PROFIT BEFORE TAX		7.8	40.7
Taxation	5	33.8	(6.4)
PROFIT FOR THE YEAR FROM CONTINUING OPERATIONS		41.6	34.3
ATTRIBUTABLE TO:			
Owners of the Company		42.7	32.8
Non-controlling interest		(1.1)	1.5
		41.6	34.3
EARNINGS PER SHARE FROM CONTINUING OPERATIONS	6		
Basic earnings per share		69.7p	53.8p
Diluted earnings per share		68.7p	53.0p
ALTERNATIVE MEASURE OF PERFORMANCE			
Adjusted operating profit from continuing operations		57.7	55.1
Adjusted operating profit attributable to non-controlling interest		(0.8)	(2.1)
Pre-tax share of profits from joint ventures and associates excluding net IAS 41 valuation movement		6.2	7.1
ADJUSTED OPERATING PROFIT INCLUDING JOINT VENTURES AND ASSOCIATES		63.1	60.1
Net finance costs	4	(4.6)	(3.7)
ADJUSTED PROFIT BEFORE TAX FROM CONTINUING OPERATIONS		58.5	56.4
ADJUSTED EARNINGS PER SHARE FROM CONTINUING OPERATIONS	6		
Basic adjusted earnings per share		75.9p	69.4p
Diluted adjusted earnings per share		74.9p	68.4p

Group Statement of Comprehensive Income
For the year ended 30 June 2018

Genus plc

	2018	2018	2017	2017
	£m	£m	£m	£m
PROFIT FOR THE YEAR		41.6		34.3
Items that may be reclassified subsequently to profit or loss				
Foreign exchange translation differences	(22.4)		7.7	
Fair value movement on net investment hedges	1.3		(2.7)	
Fair value movement on cash flow hedges	1.1		2.1	
Tax relating to components of other comprehensive income	2.2		(4.6)	
		(17.8)		2.5
Items that may not be reclassified subsequently to profit or loss				
Actuarial gain on retirement benefit obligations	43.4		1.2	
Movement on pension asset recognition restriction	(2.5)		0.3	
Recognition of additional pension liability	(39.4)		(4.3)	
Tax relating to components of other comprehensive income	(0.3)		0.4	
		1.2		(2.4)
OTHER COMPREHENSIVE (EXPENSE)/INCOME FOR THE YEAR		(16.6)		0.1
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		25.0		34.4
ATTRIBUTABLE TO:				
Owners of the Company		26.1		33.8
Non-controlling interest		(1.1)		0.6
		25.0		34.4

Group Statement of Changes in Equity
For the year ended 30 June 2018

Genus plc

	Note	Called up share capital £m	Share premium account £m	Own shares £m	Translation reserve £m	Hedging reserve £m	Retained earnings £m	Total £m	Non-controlling interest £m	Total equity £m
BALANCE AT 30 JUNE 2016		6.1	112.3	(0.1)	37.5	(0.6)	219.3	374.5	(6.4)	368.1
Foreign exchange translation differences, net of tax		-	-	-	3.9	-	-	3.9	(0.9)	3.0
Fair value movement on net investment hedges, net of tax		-	-	-	(2.2)	-	-	(2.2)	-	(2.2)
Fair value movement on cash flow hedges, net of tax		-	-	-	-	1.7	-	1.7	-	1.7
Actuarial gain on retirement benefit obligations, net of tax		-	-	-	-	-	1.0	1.0	-	1.0
Movement on pension asset recognition restriction, net of tax		-	-	-	-	-	0.3	0.3	-	0.3
Recognition of additional pension liability, net of tax		-	-	-	-	-	(3.7)	(3.7)	-	(3.7)
Other comprehensive (expense)/income for the year		-	-	-	1.7	1.7	(2.4)	1.0	(0.9)	0.1
Profit for the year		-	-	-	-	-	32.8	32.8	1.5	34.3
Total comprehensive income for the year		-	-	-	1.7	1.7	30.4	33.8	0.6	34.4
Recognition of share-based payments, net of tax		-	-	-	-	-	4.0	4.0	-	4.0
Adjustment arising from change in non-controlling interest and written put option		-	-	-	-	-	-	-	8.6	8.6
Dividends	7	-	-	-	-	-	(13.5)	(13.5)	-	(13.5)
Issue of ordinary shares		-	0.5	-	-	-	-	0.5	-	0.5
BALANCE AT 30 JUNE 2017		6.1	112.8	(0.1)	39.2	1.1	240.2	399.3	2.8	402.1
Foreign exchange translation differences, net of tax		-	-	-	(19.7)	-	-	(19.7)	-	(19.7)
Fair value movement on net investment hedges, net of tax		-	-	-	1.0	-	-	1.0	-	1.0
Fair value movement on cash flow hedges, net of tax		-	-	-	-	0.9	-	0.9	-	0.9
Actuarial gain on retirement benefit obligations, net of tax		-	-	-	-	-	36.0	36.0	-	36.0
Movement on pension asset recognition restriction, net of tax		-	-	-	-	-	(2.1)	(2.1)	-	(2.1)
Recognition of additional pension liability, net of tax		-	-	-	-	-	(32.7)	(32.7)	-	(32.7)
Other comprehensive (expense)/income for the year		-	-	-	(18.7)	0.9	1.2	(16.6)	-	(16.6)
Profit/(loss) for the year		-	-	-	-	-	42.7	42.7	(1.1)	41.6
Total comprehensive (expense)/income for the year		-	-	-	(18.7)	0.9	43.9	26.1	(1.1)	25.0
Recognition of share-based payments, net of tax		-	-	-	-	-	6.0	6.0	-	6.0
Adjustment arising from change in non-controlling interest		-	-	-	-	-	-	-	0.8	0.8
Dividends	7	-	-	-	-	-	(14.9)	(14.9)	-	(14.9)
Issue of ordinary shares		0.1	-	-	-	-	-	0.1	-	0.1
BALANCE AT 30 JUNE 2018		6.2	112.8	(0.1)	20.5	2.0	275.2	416.6	2.5	419.1

Group Balance Sheet

Genus plc

As at 30 June 2018

	Note	2018 £m	2017 £m
ASSETS			
Goodwill	8	102.0	104.7
Other intangible assets	8	78.7	88.3
Biological assets	9	305.8	309.3
Property, plant and equipment		76.9	67.5
Interests in joint ventures and associates		19.9	22.7
Other investments		5.9	5.5
Derivative financial asset		0.3	0.1
Deferred tax assets		4.3	3.8
TOTAL NON-CURRENT ASSETS		593.8	601.9
Inventories		34.2	33.1
Biological assets	9	37.0	43.8
Trade and other receivables	10	91.0	88.8
Cash and cash equivalents		29.1	26.5
Income tax receivable		1.4	1.9
Derivative financial asset		2.5	1.3
Asset held for sale		0.2	0.3
TOTAL CURRENT ASSETS		195.4	195.7
TOTAL ASSETS		789.2	797.6
LIABILITIES			
Trade and other payables		(83.7)	(76.4)
Interest-bearing loans and borrowings		(13.4)	(7.7)
Provisions		(2.8)	(2.7)
Deferred consideration		(19.3)	-
Obligations under finance leases		(1.4)	(1.4)
Current tax liabilities		(4.4)	(5.2)
Derivative financial liabilities		(0.3)	(0.6)
TOTAL CURRENT LIABILITIES		(125.3)	(94.0)
Interest-bearing loans and borrowings		(120.7)	(127.2)
Retirement benefit obligations	11	(33.9)	(40.9)
Provisions		(4.5)	(3.7)
Deferred consideration		(4.2)	-
Non-current income tax liability		(0.9)	-
Deferred tax liabilities		(74.8)	(124.2)
Derivative financial liabilities		(3.7)	(3.7)
Obligations under finance leases		(2.1)	(1.8)
TOTAL NON-CURRENT LIABILITIES		(244.8)	(301.5)
TOTAL LIABILITIES		(370.1)	(395.5)
NET ASSETS		419.1	402.1

EQUITY

Called up share capital		6.2	6.1
Share premium account		112.8	112.8
Own shares		(0.1)	(0.1)
Translation reserve		20.5	39.2
Hedging reserve		2.0	1.1
Retained earnings		275.2	240.2
		<hr/>	<hr/>
Equity attributable to owners of the Company		416.6	399.3
Non-controlling interest		5.7	6.1
Put option over non-controlling interest	15	(3.2)	(3.3)
		<hr/>	<hr/>
Total non-controlling interest		2.5	2.8
		<hr/>	<hr/>
Total equity		419.1	402.1
		<hr/> <hr/>	<hr/> <hr/>

Group Statement of Cash Flows

Genus plc

For the year ended 30 June 2018

	Note	2018 £m	2017 £m
NET CASH FLOW FROM OPERATING ACTIVITIES	12	43.2	34.6
CASH FLOWS FROM INVESTING ACTIVITIES			
Dividends received from joint ventures and associates		2.8	3.8
Joint venture loan repayment		-	3.0
Acquisition of subsidiaries, net of cash acquired		-	(17.5)
Increase in investment in subsidiaries		-	(12.0)
Acquisition of investment		-	(0.3)
Acquisition of investment in joint venture		-	(0.2)
Payment of deferred consideration		(1.8)	-
Disposal of joint venture		-	1.5
Purchase of property, plant and equipment		(17.8)	(13.4)
Purchase of intangible assets		(4.7)	(5.5)
Proceeds from sale of property, plant and equipment		0.4	1.4
Proceeds from sale of assets held for sale		0.3	-
NET CASH OUTFLOW FROM INVESTING ACTIVITIES		(20.8)	(39.2)
CASH FLOWS FROM FINANCING ACTIVITIES			
Drawdown of borrowings		64.4	68.1
Repayment of borrowings		(66.5)	(55.7)
Payment of finance lease liabilities		(2.2)	(2.0)
Equity dividends paid		(14.9)	(13.5)
Dividend to non-controlling interest		-	(0.1)
Issue of ordinary shares		0.1	0.5
Debt issue costs		-	(0.4)
NET CASH OUTFLOW FROM FINANCING ACTIVITIES		(19.1)	(3.1)
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		3.3	(7.7)
Cash and cash equivalents at start of the year		26.5	34.0
Net increase/(decrease) in cash and cash equivalents		3.3	(7.7)
Effect of exchange rate fluctuations on cash and cash equivalents		(0.7)	0.2
TOTAL CASH AND CASH EQUIVALENTS AT 30 JUNE		29.1	26.5

For the year ended 30 June 2018

1. REPORTING ENTITY

Status of audit

The financial information given does not constitute the Company's statutory accounts for the year ended 30 June 2018 or the year ended 30 June 2017, but is derived from those accounts. Statutory accounts for the year ended 30 June 2017 have been delivered to the Registrar of Companies and those for the year ended 30 June 2018 will be delivered following the Company's annual general meeting. The auditors have reported on those accounts; 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 financial information for the year ended 30 June 2018 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 presentation 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		
	2018	2017	2016	2018	2017	2016
US Dollar/£	1.35	1.27	1.47	1.32	1.30	1.34
Euro/£	1.13	1.16	1.33	1.13	1.14	1.20
Brazilian Real/£	4.51	4.11	5.47	5.12	4.30	4.28
Mexican Peso/£	25.37	24.61	25.38	26.30	23.51	24.66

While the 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 2018. These financial statements have also been prepared in accordance with the accounting policies set out in the 2017 Annual Report and Financial Statements, as amended by the following new accounting standards.

New standards and interpretations

In the current year, 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 2017. Their addition has not had any material impact on the disclosures or the amounts reported in the Group Financial Statements.

- Amendments to IAS 7 – 'Disclosure Initiative'

- Amendments to IAS 12 – ‘Recognition of Deferred tax Assets for Unrealised Losses’
- Annual Improvements to IFRSs 2014 -2016

New standards and interpretations not yet adopted

At the date of the annual report, 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).

- *IFRS 9 – Financial Instruments*
- *IFRS 15 - Revenue from Contracts with Customers*
- *IFRS 16 - Leases*
- *Amendments to IFRS 2 – Classification and Measurement of Share-based Payments Transactions*
- *IFRIC 22 – Foreign Currency Transactions and Advance Consideration*
- *IFRIC 23 – Uncertainty over Income Tax Treatments*

IFRS 15 ‘Revenue from Contracts with Customers’ is effective for periods beginning on or after 1 January 2018 and therefore will be effective in the Group financial statements for the year ending 30 June 2019. The standard establishes a principles-based approach for revenue recognition and is based on the concept of recognising revenue for performance obligations only when they are satisfied and the control of goods or services is transferred. In doing so, the standard applies a five-step approach to the timing of revenue recognition and applies to all contracts with customers, except those in the scope of other standards. It replaces the separate models for goods, services and construction contracts under the current accounting standards.

The Group has reviewed the impact of IFRS 15 on a sample of the contracts that it enters into with its customers. Following this review, we determined that there are no material impacts to the revenue recognised in the results for the year ended 30 June 2018. Consequently, no restatement will be made to the comparatives presented in this report and no adjustment is required to the reserves.

IFRS 9 ‘Financial Instruments’ replaces IAS 39 ‘Financial Instruments: Recognition and Measurement’. The standard is effective for periods beginning on or after 1 January 2018 and therefore will be effective in the Group financial statements for the year ending 30 June 2019.

The standard introduces changes to three key areas:

- new requirements for the classification and measurement of financial instruments;
- a new impairment model based on expected credit losses for recognising provisions; and
- simplified hedge accounting through closer alignment with an entity’s risk management methodology.

The Group has completed an initial assessment of the impact of IFRS 9 and has concluded that adoption will not have a material impact on either the Consolidated Income Statement or the Consolidated Balance Sheet. The Group will apply all aspects of the new standard at the transition

date of 1 July 2018, by adjusting opening retained earnings in the balance sheet, however a restatement of the comparative periods is not expected.

IFRS 16 'Leases' is effective for periods beginning on or after 1 January 2019 and therefore will be effective in the Group financial statements for the year ending 30 June 2020.

The Group will transition to IFRS 16 on 1 June 2019. The standard introduces a comprehensive model for identifying lease arrangements and accounting treatments for both lessors and lessees and will replace the current lease accounting requirements including IAS 17 Leases and the related interpretations.

For lessees, IFRS 16 removes distinctions between operating leases and finance leases. These are replaced by a model where a right of use asset and a corresponding liability are recognised for all leases except for short-term leases and low value assets. In contrast to lessee accounting, IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17, and continues to require a lessor to classify a lease either as an operating lease or a finance lease.

From the undiscounted lease commitments, we anticipate that implementing the new standard will have a significant impact on the Group's reported assets and liabilities. In addition, the implementation of the standard will affect the Consolidated Income Statement and classification of cash flows. A reliable estimate of the financial impact on the Group's consolidated results depends on a number of unresolved areas, including; choice of transition option, approach to determining discount rates, estimates of lease-term for leases with options to break and renew and conclusion of data collection. In addition, the financial impact depends on the facts and circumstances at the time of transition. For these reasons, it is not yet practicable to determine a reliable estimate of the financial impact on the Group.

The Group is currently assessing the impact of the other new pronouncements on its results, financial position and cash flows. It is not practicable to provide a reasonable estimate of the effect of these standards until a detailed review has been completed.

Going concern

After making enquiries, 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 twelve 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 and Accounts.

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.

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. 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 to set remuneration targets.

The key APMs that the Group uses include: adjusted operating profit, adjusted profit before tax from continuing operations, adjusted earnings per share, net debt and adjusted EBITDA (as

calculated under our financing facilities and includes cash received from joint ventures and historical cost depreciation of biological assets).

The Group reports some financial measures, on both a reported and constant currency basis. The constant currency basis, which is an APM, retranslates the current year's results at the average actual periodic exchange rates used in the previous financial year. This measure eliminates the effects of exchange rate fluctuations on the year-on-year reported results.

The Group makes certain adjustments to the statutory profit measures in order to derive many of these APMs. The Group's policy is to exclude items that is considers to be significant in nature and/or quantum and where treatment as an adjusted item provides stakeholders with additional useful information to assess the Group's year-on-year trading performance. On this basis, the following were included within adjusted items for the year ended 30 June 2018:

- net IAS 41 valuation movements on biological assets - 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 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. See note 3 for further details.

The reconciliation between operating profit from continuing operations and adjusted operating profit from continuing operations is shown on the face of the Group Income Statement. All other reconciliations are included within the Financial Review section.

This preliminary announcement was approved by the Board on 5 September 2018.

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 Group Chief Executive and the Board to allocate resources to the segments and to assess their performance. From 1 July 2017, the Group's operating and reporting structure has comprised 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 and segment assets and liabilities is provided below. We do not include our adjusting items in the segments, as we believe these do not reflect the underlying progress 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	2018	2017
	£m	£m
Genus PIC	247.7	249.5
Genus ABS	210.6	195.9
Research and Development		
Porcine Product Development	9.8	10.7
Bovine Product Development	2.2	3.0
Gene Editing	-	-
Other Research and Development	-	-
	12.0	13.7
	470.3	459.1

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 the Group Income Statement.

Adjusted operating profit	2018	2017
	£m	£m
Genus PIC	88.7	87.7
Genus ABS	26.2	22.3
Research and Development		
Porcine Product Development	(17.0)	(16.6)
Bovine Product Development	(16.6)	(14.2)
Gene Editing	(5.0)	(3.5)
Other Research and Development	(7.6)	(8.4)
	(46.2)	(42.7)
Adjusted segment operating profit	68.7	67.3
Central	(11.0)	(12.2)
Adjusted operating profit	57.7	55.1

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

Other segment information

	Depreciation		Amortisation		Additions to non-current assets	
	2018 £m	2017 £m	2018 £m	2017 £m	2018 £m	2017 £m
Genus PIC	0.8	0.8	7.0	6.0	2.9	1.1
Genus ABS	2.3	2.1	2.1	2.1	9.7	3.4
Research and Development						
Research	0.3	0.3	1.1	0.9	-	2.5
Porcine Product Development	2.0	1.9	-	-	0.8	2.6
Bovine Product Development	2.1	1.4	3.6	2.2	8.9	5.6
	4.4	3.6	4.7	3.1	9.7	10.7
Segment total	7.5	6.5	13.8	11.2	22.3	15.2
Central	2.9	2.3	-	-	5.5	5.0
Total	10.4	8.8	13.8	11.2	27.8	20.2

	Segment assets		Segment liabilities	
	2018 £m	2017 £m	2018 £m	2017 £m
Genus PIC	235.9	258.3	(48.3)	(60.1)
Genus ABS	160.6	132.8	(41.2)	(41.1)
Research and Development				
Research	12.5	5.9	(1.3)	(1.4)
Porcine Product Development	209.5	182.4	(76.5)	(72.0)
Bovine Product Development	152.8	202.7	(31.1)	(52.6)
	374.8	391.0	(108.9)	(126.0)
Segment total	771.3	782.1	(198.4)	(227.2)
Central	17.9	15.5	(171.7)	(168.3)
Total	789.2	797.6	(370.1)	(395.5)

In the current year, IntelliGen assets are included within Genus ABS, however in the prior year these assets were included within Bovine Product Development as the technology had not yet commercialised globally.

Exceptional items of £5.9m expense (2017: £2.5m expense), relate to Genus ABS (£5.0m expense), Genus PIC (£0.4m expense) and our central segment (£0.5m 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.

Geographical information

The Group's revenue by geographical segment is analysed below. This analysis is stated on the basis of where the legal entity is incorporated, which is the country in which the revenue will be reported.

Revenue

	2018	2017
	£m	£m
North America	208.6	214.5
Latin America	75.1	71.4
Rest of Europe, Middle East and Africa	51.1	48.5
UK	76.7	70.0
Asia	58.8	54.7
	470.3	459.1

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

	2018	2017
	£m	£m
North America	450.2	440.1
Latin America	37.4	46.4
Rest of Europe, Middle East and Africa	41.7	37.3
UK	41.0	61.0
Asia	18.9	13.2
	589.2	598.0

Revenue by type

	2018	2017
	£m	£m
Sale of animals, semen, embryos and associated products and services	341.1	335.7
Royalties – animal and semen	121.8	116.1
Consulting services	7.4	7.3
	470.3	459.1
Interest income (see note 4)	0.2	0.8
	470.5	459.9

3. EXCEPTIONAL ITEMS

	2018	2017
Operating (expense)/income:	£m	£m
Litigation	(5.0)	(5.3)
Acquisition and integration	(1.2)	(0.6)
Other (including restructuring)	0.3	(2.3)
Pension related	-	5.7
	<u>(5.9)</u>	<u>(2.5)</u>

Litigation

Litigation includes legal fees of £5.0m (2017: £5.3m) related to the actions between ABS Global, Inc. ('ABS') and Inguran, LLC (aka Sexing Technologies or STGenetics ('ST')).

On 14 July 2014, ABS launched a legal action against ST in the US District Court for the Western District of Wisconsin alleging, among other matters, that ST: (i) has a monopoly in the processing of sexed bovine semen in the US; and (ii) unlawfully maintains this monopoly through anticompetitive conduct. The legal action aimed to remove these barriers and allow free and fair competition in the sexed bovine semen processing market ('ABS Action'). In parallel with the ABS Action, ABS also filed Inter-Partes Review applications ('IPR') before the US Patent Office challenging the validity of several of ST's group patents, which ST later claimed were infringed by ABS.

On 11 January and 15 April 2016, the Patent Trial and Appeal Board ('PTAB') ruled that US Patent No. 7,195,920 (the "920 patent") and US Patent No. 7,820,425 (the "425 patent") were unpatentable. ST appealed these decisions, and the appeal was heard by a federal court of appeals on 5 December 2017. On 23 May 2018, the federal court of appeals confirmed that the '920 and '425 patents were unpatentable. On 14 July 2015 and 2 October 2017, PTAB declined to revoke US Patent No. 8,206,987 (the "987 patent") and US Patent No. 8,198,092 (the "092 patent") respectively. ABS has appealed the '092 patent decision and the validity of the '987 patent will be considered as part of the ABS Action appeal.

On 31 March 2017, the Court entered a judgment in the ABS Action which confirmed: (i) the Company and ABS had proved that ST had wilfully maintained a monopoly in the market for sexed bovine semen processing in the US since July 2012, and awarded a permanent injunction against ST which, among other matters, relieved ABS of certain research, marketing and other non-compete restrictions contained in the 2012 semen sorting agreement between the parties; (ii) ST's '987 and '092 patents were valid and infringed; and (iii) that ABS had materially breached the confidentiality obligations under the 2012 semen sorting agreement. The Court also confirmed that: (i) the Company and ABS should pay ST an up-front amount of \$750,000 and an on-going royalty of \$1.25 per straw on commercialisation of the Genus Sexed Semen technology for the use of ST's '987 patent in the US; (ii) the Company and ABS should pay ST an up-front payment of \$500,000 and an on-going royalty of \$0.50 per straw for the use of ST's '092 patent in the US; (iii) ABS should pay XY, LLC damages of \$750,000 for the use of certain XY trade secrets; and (iv) ABS had breached the confidentiality obligations under the 2012 semen sorting agreement.

ABS and the Company appealed the '987 patent and the breach of contract decisions and the appeal hearing was heard on 20 February 2018. The parties await the Court of Appeal's decision. Damages of \$1,250,000 were paid by ABS to ST shortly after the Court's decision in the ABS Action, and ABS has subsequently amended its technology such that it does not infringe the '092 patent claims. ABS has informed ST that it does not intend to pay the \$0.50 royalty going forward. Claims for legal costs (and post judgement interest) already incurred in connection with the ABS Action have been filed by both parties. ABS has sought approximately \$5.4m in legal fees and costs already charged to the income statement and ST has sought approximately \$280,000 in legal costs (excluding fees). Both parties await the Court's decision.

On 7 June 2017, ST, XY LLC and Cytonome/ST, LLC filed proceedings against ABS, the Company and Premium Genetics (UK) Limited ('PG') in the United States District Court for the Western District of Wisconsin ("New Litigation"). The New Litigation alleges that ABS and the Company infringe seven further patents and asserts trade secret and breach of contract claims. ABS and the Company have filed an Answer and Counterclaim confirming that they do not infringe any valid patent, and alleging among other things that: (i) ST has breached its 2012 semen sorting agreement with ABS by failing to produce sorted semen that complies with the contractual specifications; and (ii) ST has obtained certain patents through inequitable conduct. In addition, ABS has filed six IPRs seeking to revoke the additional patents raised in the New Litigation. PTAB instituted hearings in relation to two IPRs, refused to institute hearings on two other IPRs, and the parties await a decision on another IPR. In relation to the final IPR, relating to U.S. Patent No. 7,208,265 ("265 patent"), ST requested an adverse judgment. ST has subsequently dismissed its '265 patent infringement claim from the New Litigation and ABS has also dismissed its anti-trust and unfair competition counter claims. ABS filed Motions for Rehearing in relation to the IPRs that were not instituted.

The hearing date for the New Litigation has been set for 1 April 2019, and the Company and ABS intend to pursue vigorously their counterclaims and defend the patent infringement and other claims.

Acquisitions and integration

During the year, £1.2m of expenses were incurred, with £0.8m of expenses in relation to acquisitions and integration, principally of Møllevang.

Other (including restructuring)

Included within 'Other' there is a credit of £0.3m which principally relates to an insurance receipt from a legacy environmental claim.

Pension related

During the prior year, National Milk Records plc ('NMR') withdrew from the MPF under a Flexible Apportionment Arrangement between NMR, Genus and the Trustees of the MPF. In return for the right to withdraw from the MPF, NMR made a one-off, lump sum cash payment of £10.1m to the MPF, equivalent to the undiscounted value of all NMR's future payments under the existing MPF recovery plan, which extends to March 2026. NMR also made a payment to Genus of £4.7m, with £1.4m being satisfied by the issue of NMR shares.

As a result of the NMR withdrawal, Genus recognised in the prior year £5.7m as an exceptional credit in the year ended 30 June 2017, with £4.5m (£4.7m payment, net of fees) being received directly from NMR, and £1.2m from the MPF pension scheme reflecting the impact of NMR paying undiscounted amounts into the scheme.

4. NET FINANCE COSTS

	2018 £m	2017 £m
Interest payable on bank loans and overdrafts	(3.0)	(2.7)
Amortisation of debt issue costs	(0.4)	(0.4)
Other interest payable	(0.2)	(0.1)
Net interest cost in respect of pension scheme liabilities	(1.0)	(1.2)
Net interest cost on derivative financial instruments	(0.2)	(0.1)
Total interest expense	(4.8)	(4.5)
Interest income on bank deposits	0.2	0.8
Total interest income	0.2	0.8
Net finance costs	(4.6)	(3.7)

5. INCOME TAX EXPENSE

Income tax expense	2018	2017
	£m	£m
Current tax expense		
Current period	11.7	9.9
Adjustment for prior periods	0.9	0.4
Total current tax expense in the Group Income Statement	12.6	10.3
Deferred tax expense		
Origination and reversal of temporary differences	(45.3)	(2.6)
Adjustment for prior periods	(1.1)	(1.3)
Total deferred tax credit in the Group Income Statement	(46.4)	(3.9)
Total income tax (credit)/expense excluding share of income tax of equity accounted investees	(33.8)	6.4
Share of income tax of equity accounted investees	1.5	1.4
Total income tax (credit)/expense in the Group Income Statement	(32.3)	7.8

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	2018	2017
Basic earnings per share	69.7p	53.8p

The calculation of basic earnings per share from continuing operations for the year ended 30 June 2018 is based on the net profit attributable to owners of the Company from continuing operations of £42.7m (2017: £32.8m) and a weighted average number of ordinary shares outstanding of 61,234,000 (2017: 60,944,000), which is calculated as follows:

Weighted average number of ordinary shares (basic)

	2018	2017
	000s	000s
Issued ordinary shares at the start of the year	61,162	61,013
Effect of own shares held	(180)	(163)
Shares issued on exercise of stock options	20	47
Shares issued in relation to Employee Benefit Trust	232	47
Weighted average number of ordinary shares in year	61,234	60,944

Diluted earnings per share from continuing operations	2018	2017
Diluted earnings per share	68.7p	53.0p

The calculation of diluted earnings per share from continuing operations for the year ended 30 June 2018 is based on the net profit attributable to owners of the Company from continuing operations of £42.7m (2017: £32.8m) and a weighted average number of ordinary shares outstanding, after adjusting for the effects of all potential dilutive ordinary shares, of 62,120,000 (2017: 61,833,000), which is calculated as follows:

Weighted average number of ordinary shares (diluted)

	2018	2017
	000s	000s
Weighted average number of ordinary shares (basic)	61,234	60,944
Dilutive effect of share options	886	889
Weighted average number of ordinary shares for the purposes of diluted earnings per share	62,120	61,833

Adjusted earnings per share from continuing operations	2018	2017
Adjusted earnings per share	75.9p	69.4p
Diluted adjusted earnings per share	74.9p	68.4p

Adjusted earnings per share is calculated on profit before 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 £46.5m (2017: £42.3m), which is calculated as follows:

	2018	2017
	£m	£m
Profit before tax from continuing operations	7.8	40.7
Add/(deduct):		
Net IAS 41 valuation movement on biological assets	28.7	1.1
Amortisation of acquired intangible assets	9.5	8.7
Share-based payment expense	5.4	4.6
Exceptional items (see note 3)	5.9	2.5
Net IAS 41 valuation movement on biological assets in joint ventures	0.5	(0.5)
Tax on joint ventures and associates	1.5	1.4
Attributable to non-controlling interest	(0.8)	(2.1)
Adjusted profit before tax	58.5	56.4
Adjusted tax charge	(12.0)	(14.1)
Adjusted profit after tax	46.5	42.3
	20.5%	25.0
Effective tax rate on adjusted profit		%

7. DIVIDENDS

Amounts recognised as distributions to equity holders in the year

	2018	2017
	£m	£m
Final dividend		
Final dividend for the year ended 30 June 2017 of 16.2 pence per share	9.9	-
Final dividend for the year ended 30 June 2016 of 14.7 pence per share	-	9.0
Interim dividend		
Interim dividend for the year ended 30 June 2018 of 8.1 pence per share	5.0	-
Interim dividend for the year ended 30 June 2017 of 7.4 pence per share	-	4.5
	<u>14.9</u>	<u>13.5</u>

The Directors have proposed a final dividend of 17.9 pence per share for 2018. 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. INTANGIBLE ASSETS

	Technology	Brand, multiplier contracts and customer relationships	Separately identified acquired intangible assets	Software Including Assets Under Construction	IntelliGen	Patents, licence and other	Total	Goodwill
	£m	£m	£m	£m	£m	£m	£m	£m
Cost								
Balance at 1 July 2016	46.6	72.7	119.3	6.9	17.8	2.6	146.6	86.0
Additions	-	-	-	0.9	3.1	1.5	5.5	-
Acquisition	6.7	7.4	14.1	-	-	-	14.1	16.2
Reclassified from tangible fixed assets	-	-	-	1.0	-	-	1.0	-
Effect of movements in exchange rates	0.1	2.2	2.3	-	0.4	-	2.7	2.5
Balance at 30 June 2017	53.4	82.3	135.7	8.8	21.3	4.1	169.9	104.7
Additions	-	-	-	3.6	1.1	-	4.7	-
Reclassified from tangible fixed assets	-	-	-	1.9	-	-	1.9	-
Transfer between classes	(1.3)	-	(1.3)	1.3	-	-	-	-
Disposals	-	-	-	-	-	(0.2)	(0.2)	-
Effect of movements in exchange rates	(0.4)	(1.8)	(2.2)	(0.2)	(0.2)	-	(2.6)	(2.7)
Balance at 30 June 2018	51.7	80.5	132.2	15.4	22.2	3.9	173.7	102.0
Amortisation and impairment losses								
Balance at 1 July 2016	22.1	40.9	63.0	5.4	-	0.2	68.6	-
Reclassified from tangible fixed assets	-	-	-	0.7	-	-	0.7	-
Amortisation for the year	2.7	6.0	8.7	1.3	0.4	0.8	11.2	-
Effect of movements in exchange rates	-	1.0	1.0	0.1	-	-	1.1	-
Balance at 30 June 2017	24.8	47.9	72.7	7.5	0.4	1.0	81.6	-
Reclassified from tangible fixed assets	-	-	-	0.4	-	-	0.4	-
Amortisation for the year	3.0	6.5	9.5	1.4	2.1	0.8	13.8	-
Effect of movements in exchange rates	(0.1)	(0.7)	(0.8)	-	-	-	(0.8)	-
Balance at 30 June 2018	27.7	53.7	81.4	9.3	2.5	1.8	95.0	-
Carrying amounts								
At 30 June 2018	24.0	26.8	50.8	6.1	19.7	2.1	78.7	102.0
At 30 June 2017	28.6	34.4	63.0	1.3	20.9	3.1	88.3	104.7
At 30 June 2016	24.5	31.8	56.3	1.5	17.8	2.4	78.0	86.0

Included within the Software class of assets is £3.4m of costs capitalised in relation to software assets that are in the course of construction. Of this, £2.6m relates to the on-going development of Genus One, a unified enterprise-wide business system.

9. BIOLOGICAL ASSETS

Fair value of biological assets	Bovine £m	Porcine £m	Total £m
Non-current biological assets	146.3	118.3	264.6
Current biological assets	-	66.4	66.4
Balance at 30 June 2016	146.3	184.7	331.0
Increases due to purchases	11.9	176.0	187.9
Decreases attributable to sales	-	(197.8)	(197.8)
Decrease due to harvest	(40.7)	(19.3)	(60.0)
Changes in fair value less estimated sale costs	10.3	66.0	76.3
Acquisition	5.4	-	5.4
Effect of movements in exchange rates	4.3	6.0	10.3
Balance at 30 June 2017	137.5	215.6	353.1
Non-current biological assets	137.5	171.8	309.3
Current biological assets	-	43.8	43.8
Balance at 30 June 2017	137.5	215.6	353.1
Increases due to purchases	9.1	117.3	126.4
Decreases attributable to sales	-	(194.7)	(194.7)
Decrease due to harvest	(35.5)	(20.0)	(55.5)
Changes in fair value less estimated sale costs	(4.2)	99.9	95.7
Acquisition (see note 14)	-	25.1	25.1
Effect of movements in exchange rates	(2.9)	(4.4)	(7.3)
Balance at 30 June 2018	104.0	238.8	342.8
Non-current biological assets	104.0	201.8	305.8
Current biological assets	-	37.0	37.0
Balance at 30 June 2018	104.0	238.8	342.8

Bovine biological assets include £6.7m (2017: £6.9m) 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.

The current market-determined post-tax rate used to discount expected future net cash flows from the sale of bull semen is the Group's weighted risk adjusted cost of capital. This has been assessed as 8.7% (2017: 8.0%).

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

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 £47.7m (2017: £87.0m).

Decreases attributable to sales during the year of £194.7m (2017: £197.8m) include £71.9m (2017: £66.6m) 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 £88.2m (2017: £111.0m) 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 £157.2m (2017: £159.5m) in respect of these contracts, comprising £48.9m (2017: £54.0m) on initial transfer of animals to customers and £108.3m (2017: £105.5m) in respect of royalties received.

For pure line porcine herds, the net cash flows from the expected output of the herds are discounted at the Group's required rate of return, adjusted for the greater risk implicit in including output from future generations. This adjusted rate has been assessed as 11.0% (2017: 11.0%). The number of future generations which have been taken into account is seven (2017: seven) and their estimated useful lifespan is 1.4 years (2017: 1.4 years).

Year ended 30 June 2018

	Bovine £m	Porcine £m	Total £m
Net IAS 41 valuation movement on biological assets*			
Changes in fair value of biological assets	(4.2)	99.9	95.7
Inventory transferred to cost of sales at fair value	(29.8)	(20.0)	(49.8)
Biological assets transferred to cost of sales at fair value	-	(75.1)	(75.1)
	<u>(34.0)</u>	<u>4.8</u>	<u>(29.2)</u>
Fair value movement in related financial derivative	-	0.5	0.5
	<u>(34.0)</u>	<u>5.3</u>	<u>(28.7)</u>

Year ended 30 June 2017

	Bovine £m	Porcine £m	Total £m
Net IAS 41 valuation movement on biological assets*			
Changes in fair value of biological assets+	10.3	66.0	76.3
Inventory transferred to cost of sales at fair value	(38.8)	(19.3)	(58.1)
Biological assets transferred to cost of sales at fair value	-	(18.8)	(18.8)
	<u>(28.5)</u>	<u>27.9</u>	<u>(0.6)</u>
Fair value movement in related financial derivative	-	(0.5)	(0.5)
	<u>(28.5)</u>	<u>27.4</u>	<u>(1.1)</u>

*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.

+includes £2.1m write down in bovine assets.

10. TRADE AND OTHER RECEIVABLES

	2018	2017
	£m	£m
Trade receivables	73.9	73.7
Other debtors	5.3	5.4
Prepayments and accrued income	10.3	7.8
Other taxes and social security	1.5	1.9
	<u>91.0</u>	<u>88.8</u>

Trade receivables

The average credit period our customers take on the sales of goods is 58 days (2017: 59 days). We do not charge interest on receivables for the first 30 days from the date of the invoice. We provide for all receivables based on knowledge of the customer and historical experience, and estimate irrecoverable amounts by reference to past default experience.

No customer represents more than 5% of the total balance of trade receivables (2017: nil).

At 30 June 2018, £55.4m (2017: £56.4m) of trade receivables were not yet due for payment.

11. 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 and 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.

	2018	2017
	£m	£m
The Milk Pension Fund – Genus’s share	24.2	30.4
The Dalgety Pension Fund	-	-
Other retirement benefit obligations and other unfunded schemes	9.7	10.5
	<u>33.9</u>	<u>40.9</u>

Overall, we expect to pay £7.5m (2018: £7.3m) in contributions to defined benefit plans in the 2019 financial year.

Summary of movements in Group deficit during the year

	2018	2017
	£m	£m
Deficit in schemes at the start of the year	(40.9)	(44.5)
Administration expenses	(0.4)	(0.6)
Exceptional gain on NMR withdrawal from MPF	-	1.2
Contributions paid into the plans	7.3	7.2
Net pension finance cost	(1.0)	(1.2)
Actuarial gain recognised during the year	43.4	1.2
Movement in restriction of assets	(2.5)	0.3
Recognition of additional liability	(39.4)	(4.3)
Reclassified from accruals	(0.5)	-
Exchange rate adjustment	0.1	(0.2)
Deficit in schemes at the end of the year	(33.9)	(40.9)

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

	2018	2017
	£m	£m
Administrative expenses	0.4	0.6
Exceptional gain on NMR withdrawal from MPF	-	(1.2)
Net finance charge	1.0	1.2
	1.4	0.6

Actuarial assumptions and sensitivity analysis

Principal actuarial assumptions at the reporting date (expressed as weighted averages):

	2018	2017
Discount rate	2.90%	2.65%
Consumer Price Index (CPI)	1.95%	2.05%
Retail Price Index (RPI)	3.05%	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 2018, 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 (2017: the mortality tables used are 97% of the S2NA tables, with birth year and 2014 CMI projections, subject to a long-term rate of improvement of 1.25% for males and females).

12. NOTES TO THE CASH FLOW STATEMENT

	2018	2017
	£m	£m
Profit for the year	41.6	34.3
Adjustment for:		
Net IAS 41 valuation movement on biological assets	28.7	1.1
Amortisation of acquired intangible assets	9.5	8.7
Share-based payment expense	5.4	4.6
Share of profit of joint ventures and associates	(4.2)	(6.2)
Finance costs (net)	4.6	3.7
Income tax expense	(33.8)	6.4
Exceptional items	5.9	2.5
	<hr/>	<hr/>
Adjusted operating profit from continuing operations	57.7	55.1
Depreciation of property, plant and equipment	10.4	8.8
(Profit)/loss on disposal of plant and equipment	(0.1)	0.2
Amortisation of intangible assets	4.3	2.5
	<hr/>	<hr/>
Adjusted earnings before interest, tax, depreciation and amortisation	72.3	66.6
Exceptional item cash	(4.9)	(5.4)
Other movements in biological assets and harvested produce	(1.9)	(5.7)
Increase in provisions	1.7	0.1
Additional pension contributions in excess of pension charge	(6.9)	(6.6)
Other	(2.0)	(0.9)
	<hr/>	<hr/>
Operating cash flows before movement in working capital	58.3	48.1
(Increase)/decrease in inventories	(4.2)	1.4
Increase in receivables	(5.7)	(9.0)
Increase in payables	9.9	5.8
	<hr/>	<hr/>
Cash generated by operations	58.3	46.3
Interest received	0.2	0.8
Interest and other finance costs paid	(3.9)	(3.1)
Cash flow from derivative financial instruments	0.2	0.6
Income taxes paid	(11.6)	(10.0)
	<hr/>	<hr/>
Net cash from operating activities	43.2	34.6
	<hr/>	<hr/>

Analysis of net debt

	At 1 July 2017 £m	Net cash flows £m	Foreign exchange £m	Non-cash movements £m	At 30 June 2018 £m
Cash and cash equivalents	26.5	3.3	(0.7)	-	29.1
Interest-bearing loans – current	(7.7)	(2.6)	0.1	(3.2)	(13.4)
Obligation under finance leases – current	(1.4)	2.2	-	(2.2)	(1.4)
	(9.1)	(0.4)	0.1	(5.4)	(14.8)
Interest-bearing loans – non-current	(127.2)	4.7	1.8	-	(120.7)
Obligation under finance lease – non- current	(1.8)	-	-	(0.3)	(2.1)
	(129.0)	4.7	1.8	(0.3)	(122.8)
Net debt	(111.6)	7.6	1.2	(5.7)	(108.5)

Included within non-cash movements is £5.3m in relation to other unsecured borrowings and new finance leases.

13. 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.

The retirement benefit obligations referred to in note 11 include obligations relating to the Milk Pension Fund 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% (2017: 85%) 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'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 2018, we have entered into bank guarantees totalling £1.0m.

14. DEFERRED CONSIDERATION

During the year, we recognised the value of Møllevang Genetics and made deferred consideration payments totalling £1.8m in respect of our previous acquisitions of De Novo Genetics and Hermitage Genetics.

Avlscenter Møllevang A/S ('Møllevang')

On 14 November 2017, Genus PIC announced that commencing 2 July 2018, it had entered into a strategic relationship with Møllevang, a leading independent Danish porcine genetics company. After 2 July 2018, Møllevang became an elite porcine genetics production partner for PIC in Denmark and will continue to distribute elite genetics to the Danish market and certain other countries.

As all material conditions for completion of the transaction with Møllevang under the terms of the subscription agreement were fulfilled at the balance sheet date, we have recognised the value of the genetics acquired in biological assets and a related total deferred consideration of £23.5m was recorded in current and non-current liabilities.

The preliminary amounts recognised in respect of the identifiable assets acquired, are set out in the table below.

	£m
Biological assets acquired (see note 9)	25.1
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Satisfied by:	
Cash consideration	1.6
Deferred consideration - Current	19.3
Deferred consideration – Non-current	4.2
	<hr/>
	25.1
	<hr/>

15. NON-CONTROLLING INTEREST

	2018	2017
	£m	£m
Non-controlling interest	5.7	6.1
Put option over non-controlling interest	(3.2)	(3.3)
Total non-controlling interest	2.5	2.8

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

	2018	2017
	£m	£m
De Novo Genetics		
Biological assets	10.7	10.2
Current assets	0.7	1.4
Non-current assets	3.1	2.4
Current liabilities	(4.2)	(2.1)
Net assets	10.3	11.9
Equity attributable to owners of the Company	(5.2)	(6.1)
Non-controlling interest for De Novo Genetics	5.1	5.8
Other non-controlling interest	0.6	0.3
Non-controlling interest	5.7	6.1

No dividends were paid to non-controlling interests (2017: £0.1m).

16. POST BALANCE SHEET EVENTS

On 2 July 2018, Genus PIC and Møllevang, a leading independent Danish porcine genetics company, signed an exclusive distribution agreement for Denmark, entered into a sireline nucleus agreement and Genus PIC purchased 49% of Møllevang. In accordance with the subscription agreement, Genus PIC paid £19.3m on 2 July 2018. Møllevang will be an elite porcine genetics production partner for PIC in Denmark and will continue to distribute elite genetics to the Danish market and certain other countries.