



For immediate release

23 February 2017

Genus plc

('Genus', the 'Company' or the 'Group')

**INTERIM RESULTS FOR THE SIX MONTHS ENDED 31 DECEMBER 2016**

**GOOD STRATEGIC PROGRESS ACHIEVED - GROWING INVESTMENT IN R&D**

Genus, a leading animal genetics company, announces its unaudited interim results for the six months ended 31 December 2016.

Six months ended 31 December	Actual currency			Constant currency**	
	2016	2015	Movement	Movement	
Adjusted Results *	£m	£m	%	%	
Revenue	<b>222.1</b>	188.3	18	3	
Operating profit	<b>24.5</b>	23.9	3	(11)	
Operating profit inc JVs	<b>26.8</b>	26.3	2	(12)	
Profit before tax	<b>25.1</b>	23.8	5	(10)	
Basic earnings per share (p)	<b>30.5</b>	28.8	6	(9)	
<b>Statutory Results</b>					
Revenue	<b>222.1</b>	188.3	18		
Operating profit	<b>10.0</b>	10.0	-		
Profit before tax	<b>11.4</b>	12.9	(12)		
Basic earnings per share (p)	<b>13.3</b>	17.4	(24)		
Interim dividend per share (p)	<b>7.4</b>	6.7	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 measures used by the Board to monitor underlying performance at a Group and operating segment level.

\*\* Constant currency percentage movements are calculated by restating FY17 results at the average exchange rates applied in FY16.

## BUSINESS HIGHLIGHTS

- Overall Group performance expected to be in line with expectations for FY17
- Revenue 3% higher in constant currency (18% in actual currency) primarily due to increased porcine breeding stock sales in China and continued PIC royalty growth
- Planned increase in research and development expenditure to drive strategic progress (up £3.3m in constant currency; £6.2m actual currency) contributed to a 10% decline in adjusted profit before tax (5% higher in actual currency)
  - Genus PIC performed well with profits up 9% in constant currency (28% in actual currency) with particular strength in PIC China. Alongside revenue and volume growth in all regions, Genus achieved 7% growth in constant currency (24% in actual currency) in strategically important royalty revenues
  - Genus ABS profits 30% lower in constant currency (down 22% in actual currency) due to lower volumes as tough market conditions continued particularly in North America and Asia. Performance was below management expectations and a leadership change has been made with the appointment in January 2017 of a new ABS Dairy Chief Operating Officer ('COO') to sharpen sales execution and drive the strategic initiatives of ABS
- Adjusted earnings per share 9% lower in constant currency (6% higher in actual currency)
- Statutory profit before tax 12% lower, reflecting non-cash fair value reductions in biological assets
- Net cash flow from operating activities of £8.3m (2015: £5.6m) reflects typical first half cash conversion<sup>1</sup> of adjusted operating profit of 55% (2015: 58%) and lower cash taxes in the period
- Net debt of £109.0m (2015: £88.2m), including adverse foreign exchange translation of £15.0m year to year, represented 1.6 times EBITDA (2015: 1.5 times)
- Continued successful progress in implementation of strategy:
  - As separately announced today: Strategic partnership with Hermitage and acquisition of Hermitage's porcine genetics to further strengthen PIC's presence in Europe
  - Completion and integration of majority-owned De Novo genetics to create a world-leading Holstein breeding programme
  - IVB operations in Mexico successfully launched and additional major US dairy enterprise customer signed
  - Genus Sexed Semen ('GSS') is ready for commercial launch while awaiting the Court's decision on an injunction
  - Preparations completed to start producing first batches of elite gene edited pigs to scale up development under the Porcine Respiratory and Reproductive Syndrome virus ('PRRSv') programme
- Interim dividend increased 10% to 7.4 pence per share payable on 31 March 2017

Karim Bitar, Chief Executive, commented:

*"PIC continued to perform strongly but results in ABS were disappointing in challenging market conditions, particularly in North America and Asia. As communicated in our full year 2016 results, we increased our research and development investment significantly in the period to drive our long-term*

*growth strategy, although as expected this held back financial performance during the first half.*

*“The completion of De Novo Genetics to create a world-leading Holstein dairy development programme and our transaction announced today with Hermitage to further strengthen PIC’s presence in Europe, demonstrate our drive to continually build the strategic position of Genus as we seek to pioneer animal genetic improvement globally.*

*“We expect to make further progress during the second half of the year and anticipate that our full year performance will be in line with expectations.”*

<sup>1</sup> Cash conversion is the cash generated by operations £13.5m (2015: £13.9m) divided by adjusted operating profit from continuing operations £24.5m (2015: £23.9m).

An analyst meeting will be held at 9.30am today at Buchanan’s offices (107 Cheapside, London EC2V 6DN). A live audio feed will be available to those unable to attend this meeting in person. To connect to the web cast facility, please go to the following link:

<http://vm.buchanan.uk.com/2017/genus230217/registration.htm> approximately 10 minutes (9.20am) before the start of the meeting.

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This announcement is available on the Genus website [www.genusplc.com](http://www.genusplc.com)

## **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 all 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 production. Genus's customers' animals produce offspring with greater production efficiency, and quality, and use these to supply the global dairy and meat supply chain.

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.

## GROUP PERFORMANCE

As previously indicated, Genus increased research and development expenditure to drive progress against its long-term strategic objectives during the first half of the year. As a result, adjusted profit before tax was 10% lower in constant currency for the six months to 31 December 2016 (5% higher in actual currency) and earnings per share were 9% lower in constant currency (6% higher in actual currency). Actual currencies had a £3.7m positive effect on profit due to the weakness of Sterling, primarily against the US Dollar.

### Results

Revenue of £222.1m for the six months to 31 December 2016 (2015: £188.3m) was 18% higher in actual currency and 3% higher in constant currency. PIC revenue growth of 7% in constant currency was the main factor; PIC China had a very strong first half, with a buoyant market helping to drive strong up-front breeding stock sales. PIC Philippines and PIC Mexico also performed well, increasing royalty revenue by 27% and 21% respectively. In contrast, Genus ABS revenue declined 4%, with semen volume related declines in North America and Asia being partially offset by revenue growth in Latin America and in IVB. Adjusted operating profit including joint ventures was 2% higher in actual currency but 12% lower in constant currency.

Porcine volume growth of 4% was helped in particular by the strong performance in China. The percentage of volumes under strategically important royalty contracts grew 1pt to 77%. Bovine volumes were 6% lower with US, Brazil and China particularly affected by the weak markets and intense price competition. However, a return to growth in Europe of 3% was encouraging.

Genus PIC performed strongly with a profit increase of 9% in constant currency (28% in actual currency) helped by solid volume performance across all regions, particularly in Asia, and continued focus on growing royalty business with key large accounts. Genus ABS's 30% decline in profit in constant currency (22% in actual currency) was disappointing and impacted by tough trading conditions in North America and deferred sales in Asia. Management actions taken continued to improve efficiency, increase the pace of strategic initiatives and increase value capture in Latin America. To improve performance further and sharpen execution, a new ABS Dairy Chief Operating Officer, Nate Zwald, a highly accomplished commercial leader with deep industry expertise and a PhD in dairy genetics, was appointed in January 2017. IVB made another strong contribution, ahead of expectations, delivering double digit profit growth. Research and development spending was increased by £3.3m or 21% in constant currency (£6.2m or 39% in actual currency) as planned strategic innovation continued to be prioritised, particularly in the PRRSv resistance project and GSS.

Net finance costs were £1.7m (2015: £2.5m), reflecting lower pension interest. Adjusted profit before tax increased 5% in actual currency to £25.1m (2015: £23.8m), but was 10% lower in constant currency. The tax rate on adjusted profits was 25.9% (2015: 26.5%), and adjusted earnings per share were up 6% to 30.5 pence (2015: 28.8 pence).

The Group monitors performance principally through these adjusted measures which exclude certain non-cash items, including the fair value movement on biological assets, share-based payments and exceptional items which can be volatile period to period. In this period the bovine biological assets fair value reduced as a result of lower semen volumes and an increase in the assumed percentage of genomic semen sales in the future, partially offset by an increase in the porcine biological assets. Fair value movements on biological assets also reduced the statutory results of the Group's joint ventures compared with the prior year. The statutory results, including these and other adjusting items, show a 12% reduction in profit before tax to £11.4m (2015: £12.9m) and a 24% reduction in earnings per share to 13.3 pence (2015: 17.4 pence). The Board believes that the adjusted results give a better

view of underlying performance.

### **Cash Flow and Net Debt**

The net cash flow from operating activities of £8.3m (2015: £5.6m) reflected expected seasonal working capital outflows and higher exceptional items, but benefited from lower cash tax payments. Investments in the period included the acquisition of De Novo Genetics and planned payments to Caribou Biosciences. The Besun joint venture repaid £1.7m of shareholder loans in the period, which were part of the initial investment to establish the venture in 2013.

Net debt as at 31 December 2016 was £109.0m (2015: £88.2m), reflecting seasonal cash flows, continuing investment and £15.0m adverse impact of exchange movements, as Group borrowings are denominated primarily in US Dollars. The balance sheet remains healthy with net debt to EBITDA of 1.6 times (2015: 1.5 times).

### **Dividend**

Based on its confidence in the Group's strategy and growth prospects, the Board has approved an interim dividend of 7.4 pence per share, an increase of 10% on last year's interim dividend of 6.7 pence per share. The interim dividend is payable on 31 March 2017 to those shareholders on the register at 2 March 2017.

### **Post Balance Sheet Events**

On 22 February 2017 the Group signed an agreement to acquire the genetic assets and related intellectual property of Hermitage, and engage Hermitage as a distributor and multiplier of PIC genetics. Hermitage is an Irish-based porcine genetics business with high-health, efficient operations in several countries including in Europe and Russia. The transaction and ongoing relationship with Hermitage will further strengthen PIC in Europe. The completion of the transaction is subject to a number of conditions, which are expected to be fulfilled by the end of March 2017.

The majority of the Group's financing facilities have also been extended by an additional year to now run through to 22 February 2022.

### **Progress on Strategy**

Genus's business model is founded on owning and controlling elite animals, employing technology to improve continuously their value as breeding animals for meat and dairy farmers, and delivering these improvements to Genus's customers quickly and efficiently.

During the period, the Group continued to drive genetic improvement at accelerated rates in its porcine and bovine businesses. The Group completed and integrated the majority-owned acquisition of De Novo Genetics to create a world-leading dairy genetic improvement programme in partnership with DeSu, the leading independent Holstein breeder. While the biological results will take time to be fully evident, the Group is encouraged by the early signs of the genetic quality of the matings being made.

The agreement with Hermitage outlined above will further strengthen PIC's presence in the European market where it has been successfully growing in recent years. Hermitage will benefit from access to PIC's leading genetics, while PIC will gain access to Hermitage's efficient multiplication and distribution capability to smaller customers in certain markets.

GSS, Genus's proprietary semen sexing technology, is fully operational and ready for commercial launch. Processing bovine semen has begun in preparation for full commercial launch, which is expected to take place during 2017. Genus still awaits a decision by the Court in Wisconsin on its request for an injunction to terminate early its current contract with Sexing Technologies which expires on August 31, 2017.

The Group's long-term PRRSv-resistance programme made good progress in the development of the technology. Genus has been working with its strategic partner, Caribou Biosciences, to screen and refine the CRISPR-Cas 9 editing reagent to be used in the first generation edits of elite pig embryos. In November, the Group co-founded RenOVate Biosciences, a biotech company focused on creating gene edited livestock for agricultural and other applications. The company, which was co-founded with Assistant Professor Bhanu Telugu (University of Maryland), will work with Genus over the next 18 months to produce batches of elite pigs edited with the Caribou reagents. These animals will form the foundation of the next stage of development and performance testing.

IVB, Genus's bovine embryo business, grew strongly as customers look to harness the benefit of selecting both elite male and female parent donors. The recently launched Mexican embryo laboratory has successfully ramped up production in the period from a standing start at the beginning of the financial year. The outlook for IVB is positive, following the signing of another large dairy enterprise customer in the US in the period.

## **Outlook**

Market conditions in the coming months are expected to be broadly favourable in porcine, and gradually improving in dairy, though with continuing intense competition between bovine genetics providers. With the actions taken, the Group expects to make continued positive progress in the second half, while funding the increased research and development spending. Currencies are projected to remain favourable, and for the full year, performance is anticipated to be in line with management's expectations.

## REVIEW OF OPERATIONS

### Genus PIC

	Actual Currency			Constant
	2016	2015	Movement	Currency
	£m	£m	%	Movement
				%
Revenue	122.5	99.1	24	7
Adjusted operating profit exc JV	42.8	33.1	29	11
Adjusted operating profit inc JV	46.1	36.0	28	9
Adjusted operating margin exc JV	34.9%	33.4%	1.5 pts	1.2 pts

Genus PIC comprises the Group's porcine business globally, including Asia which was reported separately in previous years.

### Market

Global pork prices overall recovered in the latter half of 2016 and all four of the major global pork exporting countries (US, Canada, Europe and Brazil) saw price increases through the year. In the US, lean hog carcass prices appreciated more than 30% from a deep low point in October 2016, which had been driven by concerns about available slaughter capacity. Processors in the US achieved very robust margins throughout the year, capturing historically high value on wholesale cuts. Additional slaughter capacity is coming on stream in the US in 2017 which is positive for pork producers. Mexico is a major export market for the US pork industry, however there is no indication at this point of pork trade disruption in 2017.

Pig prices in the EU began a steady recovery in the second quarter of 2016, improving 32% from the March low to a peak in September, helped by over a 70% share of China's pork imports. Brazil faced inflation, high input costs and poor domestic demand. It did however, see a 33% growth in exports and a late pig price rally to give producers their first profitable month of the year in December.

Continuing tight supply and high pig prices in China stimulated aggressive import demand that more than doubled in 2016 and provided the primary stimulus to the global pork trade. High producer profits will likely encourage domestic expansion by large scale producers in China, although stricter environmental controls will constrain backyard expansion.

The USDA World Agriculture Supply and Demand report is predicting a 5.1% growth in US pork production in 2017. Global pork production is projected to be 3% higher in 2017, with China (+3.6%), Brazil (+3.1%) and Russia (+4.7%), potentially leading to a global supply that will outstrip demand in the coming months. However, the USDA project total world cereal production to also reach record levels which should translate into lower costs of production for PIC's customer base.

### Performance

During the period, Genus PIC performed well with volumes up 4% and revenue up 7% in constant currency with royalty revenue growth of 7% and breeding stock sales into royalty contracts up 19%, supporting this strategically important trend in the future. Operating profits including joint ventures

of £46.1m was up 9% in constant currency, primarily from strong growth in Asia, particularly China, and margins were increased by over a percentage point.

After several years of sustained growth across the Americas, PIC made significant investments to prepare the business to continue to expand value to a growing customer base. These initiatives included: an expansion of the supply chain for maternal and terminal products; updating of PIC's owned nucleus facilities; and continually increasing the quality and quantity of the staff available to help deliver on the PIC value proposition for customers.

These investments led to slightly lower profits in North America in constant currency on volume growth of 2%. Performance benefited from moderate industry growth and productivity. Greater customer uptake of very high genetic merit terminal boars through PIC's premium-priced CBV Plus and CBV Max programmes further contributed to performance.

Latin American profits improved on a 3% volume increase, helped by a strong operating profit performance in Mexico which was up 21%. In Brazil, joint venture income declined by 16% in constant currency due to the prolonged negative margins producers have been facing. In the Andean region, profit declined by 6% due to economic instability in Venezuela.

In Europe, volumes were slightly lower as we continued to shift the distribution model, however, revenues increased by 4% driven by higher royalty fees and operating profit improved by 22%. The transformation of PIC Europe to focus on royalty business with larger producers has been underway over the last few years and is continuing to show benefits, along with price to value initiatives and overall better market conditions for producers. The acquisition of Hermitage's genetics and future partnership is anticipated to further accelerate the growth and contribution of PIC Europe.

In Asia, volumes increased 17% with a 26% increase in royalty volumes and a 8% increase in upfront volumes. Profits in Asia more than doubled with good growth in all countries. In China, profits grew over 150% in constant currency, due to increased up-front breeding stock sales, helped by strong market conditions. Strong double digit growth in Russia, Philippines, and franchises further underpinned performance across Asia.

Overall, the PIC business performed well despite varying global market conditions and continued global investment to enhance product supply and differentiation. These investments will enable Genus PIC to serve customers better, mitigate market risks, and support future growth.



## Genus ABS

	Actual Currency			Constant
	2016	2015	Movement	Currency
	£m	£m	%	Movement
				%
Revenue	93.4	85.1	10	(4)
Adjusted operating profit	9.0	11.1	(19)	(28)
Adjusted operating profit less non-controlling interest	8.3	10.6	(22)	(30)
Adjusted operating margin	9.6%	13.0%	(3.4 pts)	(3.3 pts)

Genus ABS comprises the Group's global dairy and beef businesses, including Asia which was reported separately in previous years.

### Market

During the second half of 2016, milk prices started to recover globally after more than 24 months at depressed levels. This was initially driven by constrained supply within European markets such as the UK where the dairy cow population reduced by almost 7% between July and October and the Netherlands slowing growth in anticipation of a 10% reduction in cow numbers in the first half of 2017 to comply with environmental legislation. The improved prices enabled the European Commission to start releasing stocks of powdered milk built during the past year.

The US has sustained milk output levels with the 2016 milk output beating prior year levels as ongoing genetic improvement, herd health and feed quality supported improved yields per cow. High feed prices and a period of under-investment in Brazil saw a reduction in milk production of 10% from mid-2015 to mid-2016 resulting in a sharp milk price rise to September, however, more recent production increases have helped bring prices back down. New Zealand milk output was slowed with a particularly wet spring which will limit annual milk production and subsequent exports.

Demand for dairy imports appears to be increasing in China once more, with low milk prices to Chinese dairy farmers restricting output while demand for quality dairy products is improving, albeit only at a moderate pace. Overall it appears that milk prices will continue to rise in the early part of 2017 but may level off after the first quarter, depending on how quickly dairy farmers respond to these improved prices and whether Russia begins importing globally again.

Domestic demand was the major challenge to the beef sector in Brazil. High inflation and growing unemployment are suppressing beef consumption, resulting in lower prices throughout the supply chain. After a strong start, exports also weakened during the calendar year and were down 22% in October, however, recent access to the US market and to Japan should be supportive in 2017. In the United States, cattle prices trended down, 20% less than the prior year, while production increased by 6%. Exports increased by 9%, with a sharp improvement in the second half of the year.

### Performance

Adjusted operating profits for Genus ABS were 30% lower in constant currency, on the back of a 6%

volume decrease and a 4% decline in revenues. Asia and North America were key contributors to the lower performance. Global beef volumes declined 3%, however, beef semen revenues increased 4% on increasing pricing in Latin America and other factors. Market conditions remained challenging for customers and competition amongst genetic providers reached new levels of intensity. ABS continued to execute plans to improve efficiency globally, to raise prices in Latin America and to drive strategic initiatives even faster. To accelerate strategic initiatives and improve sales execution a new global COO for the ABS Dairy business has been appointed, Nate Zwald, who joined in January 2017.

In North America, profits decreased by 27% in constant currency, driven by an 11% conventional dairy volume decrease, although this was partially offset by increased sorted semen volumes (up 17%), a higher blend and lower cost base. Beef had a difficult start to the year, with volumes down 15% over the prior year, reflecting the steep drop in cattle prices which impacted customers.

In Europe, profits were up 5% in constant currency despite conventional dairy volumes declining 2%, helped by strong growth in the Promar consulting business, the UK's largest Agricultural and Agri-food consultancy. Beef volumes increased by 13% as customers continued to trim dairy herd sizes by producing beef cross-bred offspring for slaughter. Strong cost reduction actions taken last year helped to increase profit margins in the first half of the year, even as markets showed only slow growth.

In Latin America, profits were up 26% in constant currency, despite volumes declining 7% in tough dairy markets. As a response to inflation, Genus ABS continues to take the market lead in increasing selling prices in key markets such as Brazil and Argentina, where prices were on average 23% higher. Reduced domestic demand in Brazil and lower exports reduced Latin America beef volumes by 9%.

Performance was weak in Asia with profits down 70%. Poor demand in China due to difficult market conditions, phasing of shipments to distributor markets and the impact on demand of demonetisation in India all contributed to the result. In January 2017, Jerry Thompson resumed leadership of the Asia ABS business, in addition to his role as COO of ABS Beef, to leverage his experience in the region to drive an improved performance.

IVB performed well and continued to exceed expectations. Embryo shipments were up 16% and IVB continued to deliver strong double digit revenue and profit growth. Operations in Mexico successfully ramped up in the half year and another major US dairy enterprise customer was contracted towards the end of the period, giving an opportunity for significant growth in 2017 and beyond.

Conditions in dairy and beef markets have remained very challenging during the first half and although there are signs of improvement, particularly in Europe, the second half will continue to be difficult. The longer-term transformation in ABS continues and with the announcement of the new Dairy leader, Nate Zwald, the Board believes we have the right person to leverage our strong strategic competitive position and drive commercial execution.

## Research and Development

	Actual Currency			Constant
	2016	2015	Movement	Currency
	£m	£m	%	Movement
				%
Research	6.1	2.7	126	96
Porcine product development	8.2	6.4	28	9
Bovine product development	7.3	6.6	11	(3)
Net expenditure in R&D	21.6	15.7	38	19
Net expenditure in R&D inc non-controlling interest	21.9	15.7	39	21

Total research and development spending increased as planned by 39% to £21.9m (up 21% in constant currency) for the half year, as Genus pursued key strategic initiatives to further strengthen its proprietary differentiated offerings. Genus expects to continue increasing investment in this area particularly in research and development connected to gene editing pigs under the PRRSv programme.

Research expenditure increased 96% in the period in constant currency. Key components included expenses associated with the investigational PRRSv resistance project, where work was undertaken with Caribou Biosciences to screen editing reagents and established a collaborative venture called RenOVate to produce first generation elite gene edited pigs. These costs will continue to grow as the Group pursues the next stages of development and start to produce the initial gene edited animals.

Genus continued to invest in GSS to ensure readiness for commercialisation, incurring expenses to scale up product manufacturing for commercial launch. Industry-leading research continued in developing genomic selection and gene editing technologies to drive genetic improvement and differentiation even faster, and spending increased on intellectual property creation and protection.

The execution of single-step genomic evaluation on all porcine pure line populations, retail products and all traits of economic importance, is continuing to exceed the aim of a 35% increase in the rate of genetic gain compared with the period before its implementation. Spending growth in porcine product development was a result of increased animal volumes and related operating expenses in PIC's nucleus herds and lower market prices for by-product pigs. These cost increases were partially offset by lower costs due to project phasing on genetic testing fees and global genetic dissemination.

Bovine product development has integrated De Novo Genetics, a majority owned company created in September 2016 with DeSu Holsteins. The ABS internal heifer nucleus and the De-Su elite genetic herd were combined in De Novo Genetics to create a world-leading genetic improvement programme to produce differentiated Holstein genetics for ABS. Internal heifer breeding produced 20% of the Group's North American Holstein bull intake in the period (2016: 18%) with encouraging quality of animals focused on economically important traits. Genus continues to grow its genomic database and expertise in Real World Data and are exploring new proprietary traits. There was also continued investment in building a beef nucleus herd to develop unique customer products to enable value capture in the beef supply chain through genetic improvement and differentiation.

## **PRINCIPAL RISKS AND UNCERTAINTIES**

The Genus approach to risk management is to identify, evaluate and prioritise risks and uncertainties and actively manage actions to mitigate them. The Genus plc Annual Report 2016 (a copy of which is available on the Genus plc website at [www.genusplc.com](http://www.genusplc.com)) sets out on pages 18-19 a number of risks and uncertainties that might impact upon the performance of the Group. There has been no material change to the principal risks that might affect the performance of the Group in the current financial year.

**GENUS PLC**  
**CONDENSED CONSOLIDATED INCOME STATEMENT**  
**For the six months ended 31 December 2016**

	Notes	Six months ended 31 December 2016 £m	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m
Revenue	4	222.1	188.3	388.3
<b>Adjusted operating profit</b>	4	<b>24.5</b>	23.9	49.3
<b>Adjusting items:</b>				
- Net IAS 41 valuation movement on biological assets	10	(5.0)	(7.6)	(17.1)
- Amortisation of acquired intangible assets	9	(3.6)	(3.0)	(6.1)
- Share-based payment expense		(1.7)	(0.8)	(3.8)
- Exceptional items:				
- Litigation	5	(2.9)	(2.5)	(6.9)
- Acquisition and integration	5	(0.3)	(0.1)	(0.2)
- Other (including restructuring)	5	(1.0)	(0.2)	(0.8)
- Pension related	5	-	0.3	44.2
Total exceptional items		(4.2)	(2.5)	36.3
<b>Total adjusting items</b>		<b>(14.5)</b>	(13.9)	9.3
<b>Operating profit</b>		<b>10.0</b>	10.0	58.6
Share of post-tax profit of joint ventures and associates retained	11	3.1	5.4	6.9
Finance costs	6	(2.2)	(2.6)	(4.7)
Finance income	6	0.5	0.1	0.1
<b>Profit before tax</b>		<b>11.4</b>	12.9	60.9
Taxation	7	(2.6)	(1.9)	(10.6)
<b>Profit for the period from continuing operations</b>		<b>8.8</b>	11.0	50.3
<b>Attributable to:</b>				
Owners of the Company		8.1	10.6	49.3
Non-controlling interest		0.7	0.4	1.0
		<b>8.8</b>	11.0	50.3
<b>Earnings per share from continuing operations</b>				
Basic earnings per share	13	13.3p	17.4p	81.1p
Diluted earnings per share	13	13.1p	17.2p	80.3p
<b>Non-statutory measure of profit</b>				
Adjusted operating profit from continuing operations		24.5	23.9	49.3
Operating profit attributable to non-controlling interest		(1.0)	(0.5)	(1.4)
Pre-tax share of profits from joint ventures and associates excluding net IAS 41 valuation movement		3.3	2.9	6.4
<b>Adjusted operating profit including joint ventures and associates</b>		<b>26.8</b>	26.3	54.3
Net finance costs	6	(1.7)	(2.5)	(4.6)
<b>Adjusted profit before tax from continuing operations</b>		<b>25.1</b>	23.8	49.7
<b>Adjusted earnings per share from continuing operations</b>				
Basic adjusted earnings per share	13	30.5p	28.8p	60.7p
Diluted adjusted earnings per share	13	30.2p	28.5p	60.1p

**GENUS PLC**  
**CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME**  
**For the six months ended 31 December 2016**

	<b>Six months ended 31 December 2016</b>		<b>Six months ended 31 December 2015</b>		<b>Year ended 30 June 2016</b>	
	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>	<b>£m</b>
<b>Profit for the period</b>		<b>8.8</b>		11.0		50.3
<b>Items that may be reclassified subsequently to profit or loss</b>						
Foreign exchange translation differences	<b>40.7</b>		21.3		76.6	
Fair value movement on net investment hedges	<b>(6.9)</b>		(5.0)		(13.3)	
Fair value movement on cash flow hedges	<b>2.3</b>		-		(0.7)	
Tax relating to components of other comprehensive income	<b>(10.9)</b>		(6.1)		(16.8)	
		<b>25.2</b>		10.2		45.8
<b>Items that may not be reclassified subsequently to profit or loss</b>						
Actuarial gain/(loss) on retirement benefit obligations	<b>0.5</b>		(6.4)		(12.8)	
Movement on pension asset recognition restriction	<b>(2.7)</b>		-		(0.6)	
Release/(recognition) of additional pension liability	<b>1.3</b>		-		(14.9)	
Tax relating to components of other comprehensive income	<b>0.2</b>		0.9		4.5	
		<b>(0.7)</b>		(5.5)		(23.8)
<b>Other comprehensive income for the period</b>		<b>24.5</b>		4.7		22.0
<b>Total comprehensive income for the period</b>		<b>33.3</b>		15.7		72.3
<b>Attributable to:</b>						
Owners of the Company		<b>32.6</b>		14.2		72.1
Non-controlling interest		<b>0.7</b>		1.5		0.2
		<b>33.3</b>		15.7		72.3

**GENUS PLC**  
**CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**  
**For the six months ended 31 December 2016**

	Note	Called up share capital £m	Share premium account £m	Own shares £m	Trans- lation reserve £m	Hedging reserve £m	Retained earnings £m	Total £m	Non- controlling interest £m	Total equity £m
<b>BALANCE AT 30 JUNE 2015</b>		6.1	112.2	(0.1)	(10.1)	-	202.7	310.8	(5.7)	305.1
Foreign exchange translation differences, net of tax		-	-	-	58.2	-	-	58.2	(1.2)	57.0
Fair value movement on net investment hedges, net of tax		-	-	-	(10.6)	-	-	(10.6)	-	(10.6)
Fair value movement on cash flow hedges, net of tax		-	-	-	-	(0.6)	-	(0.6)	-	(0.6)
Actuarial loss on retirement benefit obligations, net of tax		-	-	-	-	-	(11.0)	(11.0)	-	(11.0)
Movement on pension asset recognition restriction, net of tax		-	-	-	-	-	(0.6)	(0.6)	-	(0.6)
Recognition of additional pension liability, net of tax		-	-	-	-	-	(12.2)	(12.2)	-	(12.2)
<b>Other comprehensive income/(expense) for the year</b>		-	-	-	47.6	(0.6)	(23.8)	23.2	(1.2)	22.0
Profit for the year		-	-	-	-	-	49.3	49.3	1.0	50.3
<b>Total comprehensive income/(expense) for the year</b>		-	-	-	47.6	(0.6)	25.5	72.5	(0.2)	72.3
Recognition of share-based payments, net of tax		-	-	-	-	-	3.3	3.3	-	3.3
Adjustment arising from change in non-controlling interest		-	-	-	-	-	-	-	(0.5)	(0.5)
Dividends	8	-	-	-	-	-	(12.2)	(12.2)	-	(12.2)
Issue of ordinary shares		-	0.1	-	-	-	-	0.1	-	0.1
<b>BALANCE AT 30 JUNE 2016</b>		<b>6.1</b>	<b>112.3</b>	<b>(0.1)</b>	<b>37.5</b>	<b>(0.6)</b>	<b>219.3</b>	<b>374.5</b>	<b>(6.4)</b>	<b>368.1</b>
Foreign exchange translation differences, net of tax		-	-	-	28.8	-	-	28.8	-	28.8
Fair value movement on net investment hedges, net of tax		-	-	-	(5.5)	-	-	(5.5)	-	(5.5)
Fair value movement on cash flow hedges, net of tax		-	-	-	-	1.9	-	1.9	-	1.9
Actuarial gain on retirement benefit obligations, net of tax		-	-	-	-	-	0.7	0.7	-	0.7
Movement on pension asset recognition restriction, net of tax		-	-	-	-	-	(2.7)	(2.7)	-	(2.7)
Release of additional pension liability, net of tax		-	-	-	-	-	1.3	1.3	-	1.3
<b>Other comprehensive income/(expense) for the period</b>		-	-	-	23.3	1.9	(0.7)	24.5	-	24.5
Profit for the period		-	-	-	-	-	8.1	8.1	0.7	8.8
<b>Total comprehensive income for the period</b>		-	-	-	23.3	1.9	7.4	32.6	0.7	33.3
Recognition of share-based payments, net of tax		-	-	-	-	-	1.3	1.3	-	1.3
Adjustment arising from change in non-controlling interest and written put option		-	-	-	-	-	-	-	2.2	2.2
Dividends	8	-	-	-	-	-	(9.0)	(9.0)	-	(9.0)
Issue of ordinary shares		-	0.1	-	-	-	-	0.1	-	0.1
<b>BALANCE AT 31 DECEMBER 2016</b>		<b>6.1</b>	<b>112.4</b>	<b>(0.1)</b>	<b>60.8</b>	<b>1.3</b>	<b>219.0</b>	<b>399.5</b>	<b>(3.5)</b>	<b>396.0</b>

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
<b>BALANCE AT 30 JUNE 2015</b>	6.1	112.2	(0.1)	(10.1)	-	202.7	310.8	(5.7)	305.1
Foreign exchange translation differences, net of tax	-	-	-	13.1	-	-	13.1	1.1	14.2
Fair value movement on net investment hedges, net of tax	-	-	-	(4.0)	-	-	(4.0)	-	(4.0)
Actuarial loss on retirement benefit obligations, net of tax	-	-	-	-	-	(5.5)	(5.5)	-	(5.5)
Movement on pension asset recognition restriction, net of tax	-	-	-	-	-	-	-	-	-
Recognition of additional pension liability, net of tax	-	-	-	-	-	-	-	-	-
<b>Other comprehensive income/(expense) for the period</b>	-	-	-	9.1	-	(5.5)	3.6	1.1	4.7
Profit for the period	-	-	-	-	-	10.6	10.6	0.4	11.0
<b>Total comprehensive income for the period</b>	-	-	-	9.1	-	5.1	14.2	1.5	15.7
Recognition of share-based payments, net of tax	-	-	-	-	-	1.0	1.0	-	1.0
Adjustment arising from change in non-controlling interest	-	-	-	-	-	-	-	(0.8)	(0.8)
Dividends	8	-	-	-	-	(8.1)	(8.1)	-	(8.1)
Issue of ordinary shares	-	0.1	-	-	-	-	0.1	-	0.1
<b>BALANCE AT 31 DECEMBER 2015</b>	<b>6.1</b>	<b>112.3</b>	<b>(0.1)</b>	<b>(1.0)</b>	<b>-</b>	<b>200.7</b>	<b>318.0</b>	<b>(5.0)</b>	<b>313.0</b>



**GENUS PLC**  
**CONDENSED CONSOLIDATED BALANCE SHEET**  
**As at 31 December 2016**

	Notes	31 December 2016 £m	31 December 2015 £m	30 June 2016 £m
<b>Assets</b>				
Goodwill	9	96.7	75.1	86.0
Other intangible assets	9	87.0	71.4	78.0
Biological assets	10	289.7	252.9	264.6
Property, plant and equipment		67.4	53.2	61.8
Interests in joint ventures and associates	11	26.8	23.2	24.3
Available for sale investments		3.9	0.2	3.6
Derivative financial assets	17	1.6	-	-
Deferred tax assets		5.5	8.5	4.7
<b>Total non-current assets</b>		<b>578.6</b>	<b>484.5</b>	<b>523.0</b>
Inventories		39.8	33.9	35.7
Biological assets	10	70.6	51.4	66.4
Trade and other receivables		83.2	73.2	78.1
Cash and cash equivalents		37.0	27.0	34.0
Income tax receivable		1.2	0.1	1.0
Derivative financial assets	17	0.3	0.1	0.6
Asset held for sale		0.3	-	0.3
<b>Total current assets</b>		<b>232.4</b>	<b>185.7</b>	<b>216.1</b>
<b>Total assets</b>		<b>811.0</b>	<b>670.2</b>	<b>739.1</b>
<b>Liabilities</b>				
Trade and other payables		(71.5)	(51.6)	(65.1)
Interest-bearing loans and borrowings		(2.4)	(11.5)	(4.6)
Provisions		(0.9)	(2.9)	(1.2)
Obligations under finance leases		(2.0)	(1.1)	(1.1)
Current tax liabilities		(5.2)	(3.2)	(4.9)
Derivative financial liabilities	17	(0.4)	(0.3)	(0.5)
<b>Total current liabilities</b>		<b>(82.4)</b>	<b>(70.6)</b>	<b>(77.4)</b>

	Notes	31 December 2016 £m	31 December 2015 £m	30 June 2016 £m
Interest-bearing loans and borrowings		(140.0)	(100.2)	(115.3)
Retirement benefit obligations	15	(43.3)	(67.7)	(44.5)
Deferred tax liabilities		(132.5)	(108.0)	(118.5)
Derivative financial liabilities	17	(15.2)	(8.3)	(12.6)
Obligations under finance leases		(1.6)	(2.4)	(2.7)
<b>Total non-current liabilities</b>		<b>(332.6)</b>	(286.6)	(293.6)
<b>Total liabilities</b>		<b>(415.0)</b>	(357.2)	(371.0)
<b>Net assets</b>		<b>396.0</b>	313.0	368.1
<b>Equity</b>				
Called up share capital		6.1	6.1	6.1
Share premium account		112.4	112.3	112.3
Own shares		(0.1)	(0.1)	(0.1)
Translation reserve		60.8	(1.0)	37.5
Hedging reserve		1.3	-	(0.6)
Retained earnings		219.0	200.7	219.3
<b>Equity attributable to owners of the Company</b>		<b>399.5</b>	318.0	374.5
Non-controlling interest		11.7	3.3	5.0
Put option over non-controlling interest		(15.2)	(8.3)	(11.4)
<b>Total non-controlling interest</b>		<b>(3.5)</b>	(5.0)	(6.4)
<b>Total equity</b>		<b>396.0</b>	313.0	368.1

**GENUS PLC**  
**GROUP STATEMENT OF CASH FLOWS**  
**For the six months ended 31 December 2016**

	Notes	Six months ended 31 December 2016 £m	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m
<b>Net cash flow from operating activities</b>	14	<b>8.3</b>	5.6	30.0
<b>Cash flows from investing activities</b>				
Dividends received from joint ventures and associates		-	-	2.4
Joint venture loan repayment		1.7	-	1.0
Acquisition of subsidiaries, net of cash acquired	18	(2.9)	-	(3.5)
Acquisition of investment		(0.3)	-	(3.5)
Acquisition of investment in joint venture		-	(0.2)	(0.2)
Disposal of subsidiary, net of cash disposed		-	0.1	0.1
Purchase of property, plant and equipment		(6.5)	(4.7)	(11.8)
Purchase of intangible assets		(3.7)	(2.9)	(6.8)
Proceeds from sale of property, plant and equipment		1.0	0.8	1.8
Proceeds from sale of assets held for sale		-	-	0.7
<b>Net cash outflow from investing activities</b>		<b>(10.7)</b>	(6.9)	(19.8)
<b>Cash flows from financing activities</b>				
Drawdown of borrowings		35.2	36.0	53.6
Repayment of borrowings		(17.8)	(18.6)	(37.3)
Payment of finance lease liabilities		(1.0)	(0.8)	(1.9)
Equity dividends paid		(9.0)	(8.1)	(12.2)
Dividend to non-controlling interest		-	(0.4)	(0.4)
Issue of ordinary shares		0.1	0.1	0.1
Debt issue costs		-	-	(1.4)
Decrease in bank overdrafts		(3.5)	(1.1)	-
<b>Net cash inflow from financing activities</b>		<b>4.0</b>	7.1	0.5
<b>Net increase in cash and cash equivalents</b>		<b>1.6</b>	5.8	10.7
Cash and cash equivalents at beginning of period		34.0	21.3	21.3
Net increase in cash and cash equivalents		1.6	5.8	10.7
Effect of exchange rate fluctuations on cash and cash equivalents		1.4	(0.1)	2.0
<b>Total cash and cash equivalents at end of period</b>		<b>37.0</b>	27.0	34.0

**GENUS PLC**  
**ANALYSIS OF NET DEBT**  
**For the six months ended 31 December 2016**

	At 1 July 2016 £m	Net cash flows £m	Foreign exchange £m	Non-cash movements £m	At 31 December 2016 £m
Cash and cash equivalents	34.0	1.6	1.4	-	37.0
Interest-bearing loans - current	(4.6)	2.8	(0.4)	(0.2)	(2.4)
Obligation under finance leases – current	(1.1)	1.0	(0.1)	(1.8)	(2.0)
	(5.7)	3.8	(0.5)	(2.0)	(4.4)
Interest-bearing loans – non-current	(115.3)	(16.7)	(8.0)	-	(140.0)
Obligation under finance lease – non-current	(2.7)	-	(0.2)	1.3	(1.6)
	(118.0)	(16.7)	(8.2)	1.3	(141.6)
<b>Net debt</b>	<b>(89.7)</b>	<b>(11.3)</b>	<b>(7.3)</b>	<b>(0.7)</b>	<b>(109.0)</b>

  

	At 1 July 2015 £m	Net cash flows £m	Foreign exchange £m	Non-cash movements £m	At 31 December 2015 £m
Cash and cash equivalents	21.3	5.8	(0.1)	-	27.0
Interest-bearing loans - current	(12.2)	4.9	(0.8)	(3.4)	(11.5)
Obligation under finance leases – current	(1.1)	0.8	(0.1)	(0.7)	(1.1)
	(13.3)	5.7	(0.9)	(4.1)	(12.6)
Interest-bearing loans – non-current	(77.4)	(21.2)	(4.8)	3.2	(100.2)
Obligation under finance lease – non-current	(2.4)	-	(0.1)	0.1	(2.4)
	(79.8)	(21.2)	(4.9)	3.3	(102.6)
<b>Net debt</b>	<b>(71.8)</b>	<b>(9.7)</b>	<b>(5.9)</b>	<b>(0.8)</b>	<b>(88.2)</b>

Net debt is defined as the total of cash and cash equivalents, interest-bearing loans, unamortised debt issue costs and obligation under finance leases.

**GENUS PLC**  
**NOTES TO THE CONDENSED SET OF FINANCIAL STATEMENTS**  
**For the six months ended 31 December 2016**

**1. Basis of preparation**

The unaudited Condensed Set of Financial Statements for the six months ended 31 December 2016:

- were prepared in accordance with International Accounting Standard 34 '*Interim Financial Reporting*' ('IAS 34') and thereby International Financial Reporting Standards ('IFRSs'), both as issued by the International Accounting Standards Board ('IASB') and as adopted by the European Union ('EU');
- are presented on a condensed basis as permitted by IAS 34 and therefore do not include all disclosures that would otherwise be required in a full set of financial statements; these should be read, therefore, in conjunction with the Genus plc Annual Report 2016;
- includes all adjustments, consisting of normal recurring adjustments, necessary for a fair statement of the results for the periods presented;
- do not constitute statutory accounts within the meaning of section 435 of the Companies Act 2006; and
- were approved by the Board of Directors on 22 February 2017.

The information relating to the year ended 30 June 2016 is an extract from the published financial statements for that year, which have been delivered to the Registrar of Companies. The auditor's report on those financial statements was not qualified and did not contain statements under section 498(2) or (3) of the Companies Act 2006.

The unaudited Condensed Set of Financial Statements for the six months ended 31 December 2016 has not been reviewed by our Auditor.

The Genus plc Annual Report 2016 (a copy of which is available on the Genus plc website at [www.genusplc.com](http://www.genusplc.com)) sets out on pages 18-19 a number of risks and uncertainties that might impact upon the performance of the Group. There has been no material change to the principal risks that might affect the performance of the Group in the current financial year. Having considered these risks and uncertainties, and in the current economic environment, the Directors have a reasonable expectation that the Company has adequate resources to continue in operational existence for the foreseeable future. Therefore they continue to adopt the going concern basis in preparing the half-yearly report and the Condensed Set of Financial Statements.

The preparation of the Condensed Set of Financial Statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet date, and the reported amounts of revenue and expenses during the period. Actual results could vary from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of revision and future periods if the revision affects both current and future periods.

## 2. Accounting policies and non-GAAP measures

The same accounting policies, presentation and methods of computation are followed in the Condensed Set of Financial Statements as applied in the Group's latest annual audited financial statements, dated 7 September 2016, which are available on the Group's website [www.genusplc.com](http://www.genusplc.com), except as described below.

### **New standards and interpretations**

The following new standards and interpretation have been adopted in the current period:

- Amendments to IFRS 11 '*Accounting for acquisitions of interests in Joint ventures*', IAS 27 '*Equity method in separate financial statements*', IAS 1 '*Disclosure Initiatives*';
- Amendments to IFRS 10, IFRS 12 and IAS 28 '*Investment entities: Applying the consolidation exception*';
- Amendments to IAS 16 and IAS 38 '*Clarification of acceptable method of depreciation and amortisation*'; and
- '*Annual Improvements to IFRS 2012 - 2014 cycle*'.

There has been no significant impact on the results or disclosures for the current period from the adoption of these new standards and interpretations.

At the date of the interim 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):

- '*Annual improvement 2014-2016 cycle*';
- IFRIC 22 '*Foreign currency transaction and advance consideration*';
- IAS 7 (amendments) '*Disclosure Initiative*';
- IAS 12 '*Recognition of deferred tax assets for unrealised losses*';
- IFRS 2 (amendments) '*Classification and Measurement of Share-based Payment Transactions*';
- IFRS 9 '*Financial Instruments*';
- IFRS 10 and IAS 28 (amendments) '*Sale or Contribution of Assets between an Investor and its Associate or Joint venture*';
- IFRS 15 '*Revenue from Contracts with Customers*'; and
- IFRS 16 '*Leases*'.

The Group is currently assessing the impact of the new pronouncements on its results, financial position and cash flows.

### **Non-GAAP measures – adjusted operating profit, adjusted profit before tax and adjusted earnings per share**

Adjusted operating profit, adjusted operating profit before tax from continuing operations and adjusted earnings per share exclude the net valuation movement on biological assets and related financial derivative, amortisation of acquired intangible assets, share-based payment expense, exceptional items and other gains and losses.

We believe these non-GAAP measures provide shareholders with useful information about the Group's trading performance. The reconciliation between operating profit from continuing operations and adjusted operating profit from continuing operations is shown on the face of the Condensed Consolidated Income Statement.

### 3. Foreign currencies

The principal exchange rates used were as follows:

	Average			Closing		
	Six months ended 31 December 2016	Six months ended 31 December 2015	Year ended 30 June 2016	31 December 2016	31 December 2015	30 June 2016
US Dollar/£	1.27	1.52	1.47	1.24	1.47	1.34
Euro/£	1.16	1.39	1.33	1.17	1.36	1.20
Brazilian Real/£	4.14	5.78	5.47	4.01	5.90	4.28
Mexican Peso/£	24.79	25.41	25.38	25.46	25.46	24.66

The assets and liabilities of foreign operations, including goodwill arising on consolidation, are translated into Sterling at the prevailing exchange rates at the balance sheet date. We translate these operations' revenues and expenses using an average rate for the period.

### 4. 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.

For management purposes effective 1 July 2016, the Group's operating and reporting structure now comprises three operating segments; Genus PIC, Genus ABS and Research and Development. These segments are the basis on which the Group reports its segmental information. The principal activities of each segment are as follows:

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

A segment analysis of revenue, operating profit and segment assets and liabilities are detailed 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.

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

**Revenue**

	<b>Six months ended 31 December 2016 £m</b>	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m
Genus PIC	122.5	99.1	206.5
Genus ABS	93.4	85.1	173.8
Research and Development			
Research	-	-	-
Porcine Product Development	5.4	4.1	8.0
Bovine Product Development	0.8	-	-
	<b>6.2</b>	4.1	8.0
	<b>222.1</b>	188.3	388.3

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 period is shown on the Condensed Consolidated Income Statement.

**Operating profit**

	<b>Six months ended 31 December 2016 £m</b>	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m
Genus PIC	42.8	33.1	71.7
Genus ABS	9.0	11.1	23.3
Research and Development			
Research	(6.1)	(2.7)	(8.0)
Porcine Product Development	(8.2)	(6.4)	(13.5)
Bovine Product Development	(7.3)	(6.6)	(12.9)
	<b>(21.6)</b>	(15.7)	(34.4)
<b>Segment operating profit</b>	<b>30.2</b>	28.5	60.6
Central	(5.7)	(4.6)	(11.3)
<b>Adjusted operating profit</b>	<b>24.5</b>	23.9	49.3



	<u>Segment assets</u>			<u>Segment liabilities</u>		
	<b>31</b> <b>December</b> <b>2016</b> <b>£m</b>	31 December 2015 £m	30 June 2016 £m	<b>31</b> <b>December</b> <b>2016</b> <b>£m</b>	31 December 2015 £m	30 June 2016 £m
Genus PIC	<b>253.2</b>	221.3	233.5	<b>(55.4)</b>	(50.3)	(50.3)
Genus ABS	<b>145.7</b>	143.7	144.4	<b>(43.5)</b>	(33.6)	(47.7)
Research and Development						
Research	<b>10.0</b>	9.8	3.7	<b>(0.2)</b>	(0.4)	(0.4)
Porcine Product Development	<b>172.5</b>	123.3	146.7	<b>(68.3)</b>	(51.5)	(59.6)
Bovine Product Development	<b>219.5</b>	166.2	203.1	<b>(61.5)</b>	(51.0)	(51.2)
	<b>402.0</b>	299.3	353.5	<b>(130.0)</b>	(102.9)	(111.2)
<b>Segment total</b>	<b>800.9</b>	664.3	731.4	<b>(228.9)</b>	(186.8)	(209.2)
Central	<b>10.1</b>	5.9	7.7	<b>(186.1)</b>	(170.4)	(161.8)
<b>Total</b>	<b>811.0</b>	670.2	739.1	<b>(415.0)</b>	(357.2)	(371.0)

## 5. Exceptional items

	<b>Six months ended 31 December 2016 £m</b>	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m
Operating (expenses)/income:			
Litigation	<b>(2.9)</b>	(2.5)	(6.9)
Acquisition and integration	<b>(0.3)</b>	(0.1)	(0.2)
Other (including restructuring)	<b>(1.0)</b>	(0.2)	(0.8)
Pension related	-	0.3	44.2
	<b>(4.2)</b>	(2.5)	36.3

Included within legal fees were £2.9m of legal fees related to the action by ABS Global Inc. against Inguran LLC (aka Sexing Technologies).

During the period, £0.3m of expenses were incurred in relation to acquisitions and integration, principally of De Novo Genetics (see note 18).

Included within other are costs principally relating to provisions for restructuring in our ABS business.

## 6. Net finance costs

	<b>Six months ended 31 December 2016 £m</b>	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m
Interest payable on bank loans and overdrafts	<b>(1.3)</b>	(1.1)	(1.7)
Amortisation of debt issue costs	<b>(0.2)</b>	(0.2)	(0.5)
Other interest payable	-	-	(0.1)
Net interest cost in respect of pension scheme liabilities	<b>(0.6)</b>	(1.2)	(2.2)
Net interest cost on derivative financial instruments	<b>(0.1)</b>	(0.1)	(0.2)
<b>Total interest expense</b>	<b>(2.2)</b>	(2.6)	(4.7)
Interest income on bank deposits	<b>0.5</b>	0.1	0.1
<b>Total interest income</b>	<b>0.5</b>	0.1	0.1
<b>Net finance costs</b>	<b>(1.7)</b>	(2.5)	(4.6)

## 7. Income tax expense

	<b>Six months ended 31 December 2016 £m</b>	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m
Current tax	<b>4.0</b>	4.6	9.0
Deferred tax	<b>(1.4)</b>	(2.7)	1.6
	<u><b>2.6</b></u>	<u>1.9</u>	<u>10.6</u>

The taxation charge for the period is based on the estimated effective tax rate on adjusted profits for the full year of 25.9% (2015: 26.5%).

The tax charge for the period on statutory profit of £2.6m (2015: £1.9m) represents a statutory tax rate of 22.8% (2015: 14.7%). The statutory tax rate for the period benefits from a 2.8% rate reduction from lower statutory profits primarily in the USA, including reductions in the fair value of biological assets (including joint ventures), amortisation of intangibles and exceptional legal costs on which tax relief is available at an average rate of 28% (2015: decrease in statutory tax rate of 10.7% due to net statutory losses on movements in biological assets (including joint ventures), intangible assets and exceptional items taxed at 40%).

There is a deferred tax liability at the period end of £132.5m (2015: £108.0m) which mainly relates to the recognition at fair value of biological assets and intangible assets arising on acquisition and a deferred tax asset of £5.5m (2015: £8.5m) which mainly relates to future tax deductions in respect of pension scheme liabilities, share scheme awards and financial instruments.

## 8. Dividends

	<b>Six months ended 31 December 2016 £m</b>	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m
Amounts recognised as distributions to equity holders in the period:			
<b>Final dividend</b>			
Final dividend for the year ended 30 June 2016 of 14.7 pence per share	<b>9.0</b>	-	-
Final dividend for the year ended 30 June 2015 of 13.4 pence per share	-	8.1	8.1
<b>Interim dividend</b>			
Interim dividend for the year ended 30 June 2016 of 6.7 pence per share	-	-	4.1
	<u><b>9.0</b></u>	<u>8.1</u>	<u>12.2</u>

The final dividend for the year ended 30 June 2016 was approved at the Company Annual General Meeting on 17 November 2016 and paid on 2 December 2016. On 22 February 2017 the Directors have proposed an interim dividend of 7.4 pence per share payable on 31 March 2017.

## 9. Intangible assets

	Technology	Brand, multiplier contracts and customer relationships	Separately identified acquired intangible assets	Software	Genus Sexed Semen	Patents, licence and other	Total	Goodwill
	£m	£m	£m	£m	£m	£m	£m	£m
<b>Cost</b>								
Balance at 1 July 2015	46.1	61.5	107.6	6.6	11.1	0.3	125.6	73.9
Additions	-	-	-	-	4.6	2.2	6.8	-
Acquisition	-	0.7	0.7	-	-	-	0.7	1.9
Effect of movements in exchange rates	0.5	10.5	11.0	0.3	2.1	0.1	13.5	10.2
<b>Balance at 30 June 2016</b>	<b>46.6</b>	<b>72.7</b>	<b>119.3</b>	<b>6.9</b>	<b>17.8</b>	<b>2.6</b>	<b>146.6</b>	<b>86.0</b>
Additions	-	-	-	0.5	1.7	1.5	3.7	-
Acquisition (see note 18)	-	5.0	5.0	-	-	-	5.0	4.8
Effect of movements in exchange rates	0.7	5.1	5.8	0.3	1.5	0.1	7.7	5.9
<b>Balance at 31 December 2016</b>	<b>47.3</b>	<b>82.8</b>	<b>130.1</b>	<b>7.7</b>	<b>21.0</b>	<b>4.2</b>	<b>163.0</b>	<b>96.7</b>
<b>Amortisation and impairment losses</b>								
Balance at 1 July 2015	19.8	31.5	51.3	4.5	-	-	55.8	-
Amortisation for the year	2.3	3.8	6.1	0.7	-	0.2	7.0	-
Effect of movements in exchange rates	-	5.6	5.6	0.2	-	-	5.8	-
<b>Balance at 30 June 2016</b>	<b>22.1</b>	<b>40.9</b>	<b>63.0</b>	<b>5.4</b>	<b>-</b>	<b>0.2</b>	<b>68.6</b>	<b>-</b>
Amortisation for the period	1.4	2.2	3.6	0.4	-	0.4	4.4	-
Effect of movements in exchange rates	-	3.0	3.0	-	-	-	3.0	-
<b>Balance at 31 December 2016</b>	<b>23.5</b>	<b>46.1</b>	<b>69.6</b>	<b>5.8</b>	<b>-</b>	<b>0.6</b>	<b>76.0</b>	<b>-</b>
<b>Carrying amounts</b>								
<b>At 31 December 2016</b>	<b>23.8</b>	<b>36.7</b>	<b>60.5</b>	<b>1.9</b>	<b>21.0</b>	<b>3.6</b>	<b>87.0</b>	<b>96.7</b>
<b>At 30 June 2016</b>	<b>24.5</b>	<b>31.8</b>	<b>56.3</b>	<b>1.5</b>	<b>17.8</b>	<b>2.4</b>	<b>78.0</b>	<b>86.0</b>
<b>At 30 June 2015</b>	<b>26.3</b>	<b>30.0</b>	<b>56.3</b>	<b>2.1</b>	<b>11.1</b>	<b>0.3</b>	<b>69.8</b>	<b>73.9</b>

In addition to the capitalised development expenses in respect of GSS, there is also £9.8m included within fixed assets relating to GSS.

During the period, we completed the final payment to acquire a world-wide licence to use Caribou Biosciences, Inc.'s leading CRISPR-Cas9 gene editing technology platform.

## 10. Biological assets

Fair value of biological assets	Bovine £m	Porcine £m	Total £m
<b>Balance at 1 July 2016</b>	146.3	184.7	331.0
Increases due to purchases	6.7	80.2	86.9
Acquisition (see note 18)	5.4	-	5.4
Decreases attributable to sales	-	(95.2)	(95.2)
Decrease due to harvest	(17.6)	(9.9)	(27.5)
Changes in fair value less estimated sale costs	1.4	32.8	34.2
Effect of movements in exchange rates	11.0	14.5	25.5
	<u>153.2</u>	<u>207.1</u>	<u>360.3</u>
<b>Balance at 31 December 2016</b>	<b>153.2</b>	<b>207.1</b>	<b>360.3</b>
Non-current biological assets	153.2	136.5	289.7
Current biological assets	-	70.6	70.6
	<u>153.2</u>	<u>207.1</u>	<u>360.3</u>
<b>Balance at 31 December 2016</b>	<b>153.2</b>	<b>207.1</b>	<b>360.3</b>
<b>Balance at 1 July 2015</b>	144.8	148.1	292.9
Increases due to purchases	3.4	64.4	67.8
Decreases attributable to sales	-	(79.1)	(79.1)
Decrease due to harvest	(16.2)	(8.9)	(25.1)
Changes in fair value less estimated sale costs	1.1	30.2	31.3
Effect of movements in exchange rates	8.4	8.1	16.5
	<u>141.5</u>	<u>162.8</u>	<u>304.3</u>
<b>Balance at 31 December 2015</b>	<b>141.5</b>	<b>162.8</b>	<b>304.3</b>
Non-current biological assets	141.5	111.4	252.9
Current biological assets	-	51.4	51.4
	<u>141.5</u>	<u>162.8</u>	<u>304.3</u>
<b>Balance at 31 December 2015</b>	<b>141.5</b>	<b>162.8</b>	<b>304.3</b>
<b>Balance at 1 July 2015</b>	144.8	148.1	292.9
Increases due to purchases	7.7	112.9	120.6
Acquisition	1.9	-	1.9
Decreases attributable to sales	-	(152.0)	(152.0)
Decrease due to harvest	(31.6)	(18.0)	(49.6)
Changes in fair value less estimated sale costs	2.1	67.7	69.8
Effect of movements in exchange rates	21.4	26.0	47.4
	<u>146.3</u>	<u>184.7</u>	<u>331.0</u>
<b>Balance at 30 June 2016</b>	<b>146.3</b>	<b>184.7</b>	<b>331.0</b>
Non-current biological assets	146.3	118.3	264.6
Current biological assets	-	66.4	66.4
	<u>146.3</u>	<u>184.7</u>	<u>331.0</u>
<b>Balance at 30 June 2016</b>	<b>146.3</b>	<b>184.7</b>	<b>331.0</b>

Bovine biological assets include £7.7m (2015: £7.0m) representing the fair value of bulls owned by third parties but managed by the Group, net of expected future payments to such third parties and are therefore treated as assets held under finance leases. There are no movements in the carrying value of the bovine biological assets in respect of sales or other changes during the period. 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 average cost of capital. This has been assessed as 8.0% (2015: 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 period on initial recognition of biological assets in respect of multiplier purchases, other than parent gilts, of £46.9m (2015: £23.1m).

Decreases attributable to sales during the period of £95.2m (2015: £79.1m) include £31.5m (2015: £21.0m) 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.

Porcine biological assets include £54.3m (2015: £32.6m) relating to the fair value of the retained interest in the genetics in respect of animals, other than parent gilts, to customers under royalty contracts.

Total revenue in the period, including parent gilts, includes £77.8m (2015: £60.2m) in respect of these contracts, comprising £26.0m (2015: £18.7m) on initial transfer of animals to customers and £51.8m (2015: £41.5m) 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% (2015: 11.0%). The number of future generations which have been taken into account is seven (2015: seven) and their estimated useful lifespan is 1.4 years (2015: 1.3 years).

<b>Six months ended 31 December 2016</b>	<b>Bovine £m</b>	<b>Porcine £m</b>	<b>Total £m</b>
Net valuation movement on biological assets*			
Changes in fair value of biological assets	1.4	32.8	34.2
Inventory transferred to cost of sales at fair value	(15.8)	(9.9)	(25.7)
Biological assets transferred to cost of sales at fair value	-	(13.1)	(13.1)
	<b>(14.4)</b>	<b>9.8</b>	<b>(4.6)</b>
Fair value movements in related financial derivative	-	(0.4)	(0.4)
	<b>(14.4)</b>	<b>9.4</b>	<b>(5.0)</b>
<b>Six months ended 31 December 2015</b>	<b>Bovine £m</b>	<b>Porcine £m</b>	<b>Total £m</b>
Net valuation movement on biological assets*			
Changes in fair value of biological assets	1.1	30.2	31.3
Inventory transferred to cost of sales at fair value	(13.8)	(8.9)	(22.7)
Biological assets transferred to cost of sales at fair value	-	(15.4)	(15.4)
	<b>(12.7)</b>	<b>5.9</b>	<b>(6.8)</b>
Fair value movements in related financial derivative	-	(0.8)	(0.8)
	<b>(12.7)</b>	<b>5.1</b>	<b>(7.6)</b>
<b>Year ended 30 June 2016</b>	<b>Bovine £m</b>	<b>Porcine £m</b>	<b>Total £m</b>
Net valuation movement on biological assets*			
Changes in fair value of biological assets	(2.9)	67.7	64.8
Inventory transferred to cost of sales at fair value	(23.6)	(18.0)	(41.6)
Biological assets transferred to cost of sales at fair value	-	(39.7)	(39.7)
	<b>(26.5)</b>	<b>10.0</b>	<b>(16.5)</b>
Fair value movements in related financial derivative	-	(0.6)	(0.6)
	<b>(26.5)</b>	<b>9.4</b>	<b>(17.1)</b>

\* This represents the difference between operating profit including fair value movement on biological assets under IAS 41 and related financial derivative and operating profit prepared under historical cost accounting, which forms part of the reconciliation to adjusted operating profit.

## 11. Equity accounted investees

The Group's share of profit after tax in its equity accounted investees for the six months ended 31 December 2016 was £3.1m (2015: £5.4m).

	<b>31 December 2016 £m</b>	31 December 2015 £m
<b>Balance at 1 July</b>	<b>24.3</b>	19.6
Share of post-tax retained profits of joint ventures and associates	<b>3.1</b>	5.4
Shareholder loan repayment	<b>(1.7)</b>	-
Addition	-	0.2
Effect of other movements including exchange rates	<b>1.1</b>	(2.0)
<b>Balance at 31 December</b>	<b>26.8</b>	23.2

Summary financial information for equity accounted investees, adjusted for the percentage ownership held by the Group:

<b>Income statement</b>	Revenue £m	Net IAS 41 valuation movement on biological assets £m	Expenses £m	Taxation £m	Profit after tax £m
<b>Six months ended 31 December 2016</b>	<b>14.9</b>	<b>0.5</b>	<b>(11.6)</b>	<b>(0.7)</b>	<b>3.1</b>
Six months ended 31 December 2015	11.0	2.8	(8.1)	(0.3)	5.4
Year ended 30 June 2016	23.7	1.9	(17.3)	(1.4)	6.9



## 12. Related parties

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note. Transactions between the Group and its joint ventures and associates are described below:

### Other related party transactions

	Transaction value			Balance outstanding		
	Six months ended 31 December 2016 £m	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m	31 December 2016 £m	31 December 2015 £m	30 June 2016 £m
Purchase of goods and services to joint ventures and associates	<u>2.3</u>	<u>0.6</u>	<u>2.0</u>	<u>(0.1)</u>	<u>-</u>	<u>(0.7)</u>

All outstanding balances with joint ventures and associates are priced on an arm's length basis and are to be settled in cash within six months of the reporting date. None of the balances are secured.

### 13. Earnings per share

	<b>Six months ended 31 December 2016 m</b>	Six months ended 31 December 2015 m	Year ended 30 June 2016 m
Weighted average number of ordinary shares (basic)	<b>60.9</b>	60.8	60.8
Dilutive effect of share options	<b>0.7</b>	0.7	0.6
	<hr/>	<hr/>	<hr/>
<b>Weighted average number of ordinary shares for the purpose of diluted earnings per share</b>	<b>61.6</b>	61.5	61.4
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>
	<b>Six months ended 31 December 2016</b>	Six months ended 31 December 2015	Year ended 30 June 2016
<b>Earnings per share from continuing operations</b>			
Basic earnings per share	<b>13.3p</b>	17.4p	81.1p
Diluted earnings per share	<b>13.1p</b>	17.2p	80.3p
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>
<b>Adjusted earnings per share from continuing operations</b>			
Adjusted earnings per share	<b>30.5p</b>	28.8p	60.7p
Diluted adjusted earnings per share	<b>30.2p</b>	28.5p	60.1p
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

Earnings per share measures are calculated on the weighted average number of ordinary shares in issue during the period. As in previous periods, adjusted earnings per share have been shown, since the Directors consider that this alternative measure gives a more comparable indication of the Group's underlying trading performance.

## Continuing operations

Basic earnings per share from continuing operations is based on the net profit attributable to owners of the Company for the period of £8.1m (six months ended 31 December 2015: £10.6m; year ended 30 June 2016: £49.3m) divided by weighted average number of ordinary shares (basic and diluted) as calculated above.

Adjusted earnings per share is calculated on profit for the period 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 £18.6m (six months ended 31 December 2015: £17.5m; year ended 30 June 2016: £36.9m), which is calculated as follows:

### Adjusted earnings from continuing operations

	Six months ended 31 December 2016 £m	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m
<b>Profit before tax from continuing operations</b>	<b>11.4</b>	12.9	60.9
Add/(deduct):			
Net IAS 41 valuation movement on biological assets and commodity futures	5.0	7.6	17.1
Amortisation of acquired intangible assets	3.6	3.0	6.1
Share-based payment expense	1.7	0.8	3.8
Exceptional items	4.2	2.5	(36.3)
Net IAS 41 valuation movement on biological assets in joint ventures and associates	(0.5)	(2.8)	(1.9)
Tax on joint ventures and associates	0.7	0.3	1.4
Attributable to non-controlling interest	(1.0)	(0.5)	(1.4)
<b>Adjusted profit before tax</b>	<b>25.1</b>	23.8	49.7
Adjusted tax charge	(6.5)	(6.3)	(12.8)
<b>Adjusted profit after tax</b>	<b>18.6</b>	17.5	36.9
<b>Effective tax rate on adjusted profit</b>	<b>25.9%</b>	26.5%	25.8%

#### 14. Cash flow from operating activities

	<b>Six months ended 31 December 2016 £m</b>	Six months ended 31 December 2015 £m	Year ended 30 June 2016 £m
Profit for the period	8.8	11.0	50.3
Adjustment for:			
Net IAS 41 valuation movement on biological assets	5.0	7.6	17.1
Amortisation of acquired intangible assets	3.6	3.0	6.1
Share-based payment expense	1.7	0.8	3.8
Share of profit of joint ventures and associates	(3.1)	(5.4)	(6.9)
Finance costs (net)	1.7	2.5	4.6
Income tax expense	2.6	1.9	10.6
Exceptional items	4.2	2.5	(36.3)
	<hr/>	<hr/>	<hr/>
Adjusted operating profit from continuing operations	24.5	23.9	49.3
Depreciation of property, plant and equipment	4.3	4.1	7.9
Loss/(profit) on disposal of plant and equipment	0.2	0.2	(0.2)
Profit on sale of asset held for sale	-	(0.2)	(0.2)
Amortisation of intangible assets	0.8	0.3	0.9
	<hr/>	<hr/>	<hr/>
Adjusted earnings before interest, tax, depreciation and amortisation	29.8	28.3	57.7
Exceptional item cash	(4.2)	(2.8)	(4.7)
Other movements in biological assets and harvested produce	(3.0)	(1.4)	(3.8)
(Decrease)/increase in provisions	(0.3)	0.5	(1.2)
Additional pension contribution in excess of pension charge	(3.1)	(3.2)	(6.1)
Other	0.4	-	0.3
	<hr/>	<hr/>	<hr/>
Operating cash flows before movement in working capital	19.6	21.4	42.2
Increase in inventories	(3.7)	(1.1)	(0.7)
(Increase)/decrease in receivables	(1.4)	1.5	2.6
Decrease in payables	(1.0)	(7.9)	(0.8)
	<hr/>	<hr/>	<hr/>
<b>Cash generated by operations</b>	<b>13.5</b>	<b>13.9</b>	<b>43.3</b>
Interest received	0.5	0.1	0.1
Interest and other finance costs paid	(1.2)	(0.9)	(1.6)
Cash flow from derivative financial instruments	0.3	-	0.1
Income taxes paid	(4.8)	(7.5)	(11.9)
	<hr/>	<hr/>	<hr/>
<b>Net cash from operating activities</b>	<b>8.3</b>	<b>5.6</b>	<b>30.0</b>
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

## 15. Retirement benefit obligations

The Group has a number of defined contribution and defined benefit pension schemes covering many of its employees, further details can be found in the Genus Annual Report 2016. The aggregated position of defined benefit schemes are provided below:

	<b>31</b>	31	30
	<b>December</b>	December	June
	<b>2016</b>	2015	2016
	<b>£m</b>	£m	£m
Present value of funded obligations	<b>372.6</b>	366.8	347.9
Present value of unfunded obligations	<b>9.4</b>	8.0	8.9
Total present value of obligations	<b>382.0</b>	374.8	356.8
Fair value of plan assets	<b>(361.8)</b>	(313.3)	(334.0)
Restricted recognition of asset	<b>9.5</b>	6.2	6.8
Recognition of additional liability (MPF)	<b>13.6</b>	-	14.9
<b>Recognised liability for defined benefit obligations</b>	<b>43.3</b>	67.7	44.5

### The Milk Pension Fund ('MPF')

The MPF was previously operated by the Milk Marketing Board, and was also open to staff working for Milk Marque Ltd (the principal employer now known as Community Foods Group Limited), National Milk Records plc, First Milk Ltd, hauliers associated to First Milk Ltd, Dairy Farmers of Britain Ltd (which went into receivership in June 2009) and Milk Link Ltd.

We have accounted for our section of the scheme and our share of any orphan assets and liabilities, which together represent approximately 75% of the MPF. Although the MPF is managed on a sectionalised basis, it is a "last man standing scheme", which means that all participating employers are joint and severally liable for all of the fund's liabilities.

Further details of the Milk Pension Fund can be found in the Genus Annual Report 2016.

The principal actuarial assumptions (expressed as weighted averages) are:

	<b>31</b>	31	30
	<b>December</b>	December	June
	<b>2016</b>	2015	2016
	<b>%</b>	%	%
Discount rate	<b>2.7</b>	3.8	2.8
Retail Price Index (RPI)	<b>3.2</b>	3.0	2.7
Consumer Price Index (CPI)	<b>2.1</b>	1.9	1.6

## 16. Contingencies

There have been no material changes to the Group's contingent liabilities relating to the Group's ongoing joint and several liability for the Milk Pension Fund, more fully described in the Genus Annual Report 2016.

There have been no changes to any other contingent liabilities involving the Group in the six months ended 31 December 2016 which are expected to have, or have had, a material effect on the financial position or profitability of the Group.

## 17. Financial instruments fair value disclosures

The table below sets out the categorisation of the financial instruments held by the Group at 31 December 2016.

We have categorised financial instruments held at valuation into a three-level fair value hierarchy, based on the priority of the inputs to the valuation technique in accordance with IFRS 13. The hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). Valuations categorised as Level 2 are obtained from third parties. If the inputs used to measure fair value fall within different levels of the hierarchy, we base the category level on the lowest priority level input that is significant to the fair value measurement of the instrument in its entirety.

	Valuation level	31 December 2016 £m	31 December 2015 £m	30 June 2016 £m
<b>Financial assets</b>				
Derivative instruments in non-designated hedge accounting relationships	2	0.4	0.1	0.6
Derivative instruments in designated hedge accounting relationships	2	1.5	-	-
<b>Financial liabilities</b>				
Derivative instruments in designated hedge accounting relationships	2	-	-	(0.7)
Derivative instruments in non- designated hedge accounting relationships	2	(0.4)	(0.3)	(1.0)
Put option over non-controlling interest	2	(15.2)	(8.3)	(11.4)

The Directors consider that the carrying value amounts of financial assets and financial liabilities recorded at amortised cost in the financial statements are approximately equal to their fair values.

## 18. Acquisition of subsidiary and related assets

On 1 September 2016, we formed De Novo Genetics, a 51% majority-owned Holstein breeding strategic partnership, with De-Su, the world's leading independent Holstein breeder. De Novo will further accelerate the proportion of bulls Genus produces internally by combining ABS's and De-Su's elite Holstein breeding programmes. This will give us greater control of the genetics we need in order to create differentiated solutions that help commercial dairy farmers increase profitability through improved herd productivity, health and efficiency.

The preliminary amounts recognised in respect of the identifiable assets acquired/transferred and liabilities assumed are as set out in the table below.

	<b>£m</b>
Intangible assets identified	<b>5.0</b>
Biological assets (including asset transferred)	<b>11.5</b>
Financial assets	<b>0.5</b>
Financial liabilities	<b>(6.3)</b>
	<hr/>
Total identifiable assets	<b>10.7</b>
Assets attributable to non-controlling interest	<b>(5.3)</b>
	<hr/>
	<b>5.4</b>
Goodwill	<b>4.8</b>
	<hr/>
Total consideration	<b>10.2</b>
	<hr/> <hr/>
Satisfied by:	
Net cash outflow arising on acquisition of subsidiary	<b>2.3</b>
Deferred cash consideration	<b>3.5</b>
Deferred contingent cash consideration	<b>0.7</b>
Biological assets transferred	<b>3.7</b>
	<hr/>
	<b>10.2</b>
	<hr/> <hr/>

The goodwill of £4.8m arising from the acquisition consists largely of future synergies expected from combining the acquired operations with existing Genus operations. None of the goodwill recognised is expected to be deductible for income tax purposes.

The fair value of the financial assets includes trade receivables with a fair value of £0.5m and a gross contractual value of £0.5m.

Acquisition and integration related costs included within exceptional items amount to £0.2m.

On 29 September 2016, we increased our shareholding in PIC Italia S.r.l from 50% to 85%, for a cash consideration of £0.6m.

## 19. Post balance sheet events

On 22 February 2017, we signed an agreement to enter into a strategic partnership, with Hermitage. PIC, Genus's porcine division, will acquire the genetic rights and intellectual property of Hermitage and combine them within its own breeding programme. Hermitage will become a strategic supply chain and distribution partner in Russia and certain European markets. In addition, PIC will acquire select Hermitage customers in Russia and certain European markets. The partnership combines PIC's leadership in genetics and Hermitage's

supply chain network and operational excellence, benefiting both PIC and Hermitage customers. The completion of the transaction is subject to a number of closing conditions, which are expected to be fulfilled by the end of March 2017.

On 22 February 2017 the Group extended the majority of its banking facilities by an additional year to 22 February 2022.



**GENUS PLC**  
**RESPONSIBILITY STATEMENT**  
**For the six months ended 31 December 2016**

We confirm that to the best of our knowledge:

- a) the Condensed Set of Financial Statements has been prepared in accordance with IAS 34;
- b) the interim management report includes a fair review of the information required by DTR 4.2.7R (indication of important events during the first six months and description of the principal risks and uncertainties for the remaining six months of the year); and
- c) the interim management report includes a fair review of the information required by DTR 4.2.8R (disclosure of related party transactions and charges therein).

Neither the Company nor the Directors accept any liability to any person in relation to the half-yearly financial report except to the extent that such liability could arise under English Law. Accordingly, any liability to a person who has demonstrated reliance on any untrue or misleading statement or omission shall be determined in accordance with section 90A of the Financial Services and Markets Act 2000.

By order of the Board

Chief Executive  
Karim Bitar

Group Finance Director  
Stephen Wilson

22 February 2017