1 Segmental analysis

The continuing operations of the Group have three main operating units: Currency, Identity Solutions and Product Authentication and Traceability. The Board, which is the Group's Chief Operating Decision Maker, monitors the performance of the Group at this level and there are therefore three reportable segments. The principal financial information reviewed by the Board is revenue and adjusted operating profit.

The Group's segments are:

- Currency provides printed banknotes, polymer substrates and banknote security components
- Identity Solutions involved in the provision of passport, ePassport, national ID and eID, driving licence and voter registration schemes
- Product Authentication and Traceability produces security documents, including authentication labels, brand licensing products, government documents, cheques and postage stamps

Inter-segmental transactions are eliminated upon consolidation.

On 29 March 2018, the Group disposed of the Portals De La Rue paper business. The results of the paper business are included within the currency segment until the date of disposal in the prior period.

2019	Currency £m	Identity Solutions £m	Product Authentication and Traceability £m	Unallocated £m	Total of Continuing operations £m
Total revenue from contracts with customers	447.5	78.4	39.3	-	565.2
Less: inter-segment revenue	(0.4)	-	-	-	(0.4)
Revenue from contracts with customers	447.1	78.4	39.3	-	564.8
Timing of revenue recognition:					
Point in time	435.2	78.1	39.3	-	552.6
Over time	11.9	0.3	-	_	12.2
Operating profit	21.0	12.2	3.4	(5.1)	31.5
Interest expense	(0.7)	-	_	(3.8)	(4.5)
Interest income	0.6	-	-	-	0.6
Retirement benefit obligations net finance expense	-	-	-	(2.1)	(2.1)
Profit before taxation	20.9	12.2	3.4	(11.0)	25.5
Segment assets	195.0	59.1	34.0	87.2	375.3
Segment liabilities	(84.3)	(47.1)	(7.2)	(265.9)	(404.5)
Capital expenditure on property, plant and equipment	11.2	_	4.2	3.5	18.9
Capital expenditure on intangible assets	1.4	2.9	2.0	0.2	6.5
Depreciation of property, plant and equipment	10.4	3.8	0.9	1.6	16.7
Amortisation of intangible assets	2.2	0.5	0.5	-	3.2

Unallocated assets principally comprise deferred tax assets of £17.4m (FY18: £19.8m), cash and cash equivalents of £12.2m (FY18: £15.5m) which are used as part of the Group's financing offset arrangements and derivative financial instrument assets of £4.2m (FY18: £3.6m) as well as current tax assets, associates and centrally managed property, plant and equipment.

Unallocated liabilities principally comprise retirement benefit obligations of £78.6m (FY18: £89.7m), borrowings of £118.7m (FY18: £63.9m), current tax liabilities of £11.7m (FY18: £13.3m) and derivative financial instrument liabilities of £6.9m (FY18: £4.5m) as well as deferred tax liabilities and centrally held accruals and provisions.

1 Segmental analysis continued

2018	Currency £m	Identity Solutions £m	Product Authentication and Traceability £m	Unallocated £m	Total of Continuing operations £m
Total revenue	372.0	82.0	40.1	_	494.1
Less: inter-segment revenue	(0.2)	-	_	_	(0.2)
Revenue	371.8	82.0	40.1	_	493.9
Adjusted operating profit	45.1	8.3	9.4	_	62.8
Amortisation of acquired intangible assets	_	(0.6)	(0.1)	_	(0.7)
Exceptional items – operating (notes 4 and 2)	(14.4)	(0.2)	(1.6)	77.1	60.9
Operating profit	30.7	7.5	7.7	77.1	123.0
Net interest expense	_	_	-	(3.8)	(3.8)
Retirement benefit obligations net finance expense	-	-	_	(5.6)	(5.6)
Profit before taxation	30.7	7.5	7.7	67.7	113.6
Segment assets	160.8	58.4	25.4	84.0	328.6
Segment liabilities	(89.4)	(41.1)	(7.6)	(211.3)	(349.3)
Capital expenditure on property, plant and equipment	6.2	1.4	7.2	5.1	19.9
Capital expenditure on intangible assets	1.5	0.4	1.0	1.9	4.8
Depreciation of property, plant and equipment	13.7	5.0	1.5	1.7	21.9
Amortisation of intangible assets	2.3	0.6	0.1	0.3	3.3
Impairment of disposal group	9.3	-	_	_	9.3

Geographic analysis of revenue by destination

	2019 £m	2018 £m
Middle East and Africa	154.1	166.8
Asia	83.7	121.7
UK	149.2	103.3
The Americas	153.6	70.7
Rest of Europe	20.1	27.8
Rest of world	4.1	3.6
	564.8	493.9

Geographic analysis of non-current assets

	2019 £m	2018 £m
UK	96.4	94.3
Malta	21.7	19.6
USA	17.0	16.4
Sri Lanka	15.2	15.7
Other countries	5.3	2.9
	155.6	148.9

Deferred tax assets and derivative financial instruments are excluded from the analysis shown above.

Major customers

The Group had one major customer from which it derived total revenues of £101.0m, which equates to 17.9% of the Group total revenues on a reported basis (FY18: £55.4m and 11.2%).

2 Discontinued operations

The Group completed the sale of the entire issued share capital of Cash Processing Solutions Limited and related subsidiaries (together 'CPS') to CPS Topco Limited, a company owned by Privet Capital on 22 May 2016.

The loss on discontinued operations in the period, of £2.4m (comprising net charges of £2.8m and £0.4m associated to tax credits), relates to costs associated with a loss-making CPS contract that was not novated post-disposal and other costs associated with the winding down of remaining activity related to CPS (net of associated tax credits). In addition, receivables due from CPS totalling £1.4m have been provided for in the year as these are now not expected to be received.

In addition, during the year there has been a £0.6m release of a historical provision for post-retirement benefits (net of associated tax credits), following an updated valuation. The release of this provision has been recorded in reserves rather than discontinued operations in the income statement as the release is considered to be consistent with that of an actuarial gain.

3 Expenses by nature

	2019 £m	2018 £m
Cost of inventories recognised as an expense	403.6	244.5
Impairment of inventories	1.7	(0.8)
Depreciation of property, plant and equipment	16.7	21.4
Impairment of disposal group	-	9.3
Amortisation of intangibles	3.2	3.3
Operating leases:		
 Hire of plant and equipment 	-	0.3
– Hire of property	3.0	2.2
Amounts payable to EY and its associates		
 Audit of these consolidated financial statements 	0.3	0.4
 Audit of the financial statements of subsidiaries pursuant to legislation 	0.4	0.3
– Non-Audit Services	-	0.3
- Taxation services	-	_
Research and non-capitalised development expense	12.4	11.8
Employee costs (including Directors' emoluments) (note 25)	126.4	151.8
Foreign exchange loss/(gains)	5.0	(7.8)

4 Exceptional items

Accounting policies

Exceptional items are disclosed separately in the financial statements to provide readers with an increased insight into the underlying performance of the Group.

	2019 £m	2018 £m
Site relocation and restructuring	(4.8)	(4.0)
Costs associated with disposal of subsidiary	-	(5.1)
Impairment of disposal group	_	(9.3)
Loss on disposal net of transaction costs	(2.6)	-
Acquisition related	(0.2)	(0.2)
Guaranteed minimum pension adjustment	(1.7)	-
Gain on revaluation of measurement of pension scheme deficit	-	80.5
Pension underpin costs	(0.5)	-
Venezuela expected credit loss provision	(18.1)	_
Costs associated with the indexation change on the pension scheme	_	(1.0)
Exceptional items in operating profit	(27.9)	60.9
Tax (charge)/credit on exceptional items	4.2	(9.7)

4 Exceptional items continued Site relocation and restructuring costs

Site relocation and restructuring costs in FY19 included: Net charges of £1.9m relating to the final stages of the manufacturing footprint review announced in December 2015 comprising staff compensation payments, 'dual running' costs for the period in FY19 when the Group was running both the new PA&T manufacturing facility in Malta and the old facility in Gateshead and the impairment of certain assets which are no longer expected to be used for their original useful lives. This restructuring programme is expected to be completed in FY20.

£1.3m (FY18: £2.2m) relating to the final stages of the upgrade of our finance systems and processes which included staff compensation payments, personnel costs for individuals solely employed to work on the project and consultancy fees. This will be completed in FY20.

£1.6m of staff compensation payments was incurred in relation to the review of our cost base which was announced HY19.

Impairment of disposal group and loss on disposal

In December 2017 the Group committed to a plan to sell the Group's Paper business, and accordingly presented the Paper business' assets and liabilities as a disposal group held for sale. In accordance with IFRS 5, prior to sale the disposal group's carrying value was compared to its fair value less costs to sell the resulting Impairment loss of £9.3m.

In the current period an additional loss on disposal of £2.6m net of transaction costs has been recorded due to finalisation of the disposal accounting post-year end on confirmation of the final working capital adjustment and update of the estimated liability under the recompense clause.

Acquisition costs

Additional costs of £0.2m were incurred in the period relating to staff retention payments fell due relating to the acquisition of De La Rue Authentication Solutions Inc.

Pension underpin costs

Legal fees of £0.5m have been incurred in the rectification of certain discrepancies identified in the Scheme's rules. The Directors do not consider this to have an impact on the UK defined benefit pension liability at the current time but they are continuing to assess this.

Costs associated with disposal of subsidiary

In FY18 costs of £5.1m were incurred on the disposal of the Paper business.

Guaranteed minimum payment adjustment

On 26 October 2018, a landmark pension case involving the Lloyds Banking Group's defined benefit pension schemes was handed down by the High Court. The judgement brings some clarity to defined benefit pension schemes in general and requires schemes to equalise pension benefits between men and women relating to Guaranteed Minimum Pensions (or 'GMP'). This has resulted in an increase of £1.7m to our obligation in the period which is accounted for in the income statement as a past service cost but presented within exceptional items. The estimate was performed based on method C2 (under the terminology of the High Court Judgement), which compares each member's accumulated benefits, with interest, to the same benefits if the member were the 'opposite sex' and ensuring the higher of the two accumulated amounts has been paid in each year.

Gain on revaluation of pension scheme deficit

In November 2017 the Trustee of the Defined Benefit Scheme decided to change indexation of future increases to the Defined Benefit Scheme benefits from the Retail Prices Index (RPI) to the Consumer Prices Index (CPI), effective from April 2018. The decision was made following a request from the Company and a detailed legal review upon which the Trustee concluded that CPI is currently a more suitable index for the calculation of annual increases in the Scheme. This change led to a past service credit of £80.5m which was recorded within exceptional items in the prior period. The Directors continue to assess any residual impact from this change.

Venezuela credit loss provision

£18.1m credit loss associated with the outstanding accounts receivable of a customer in Venezuela currently unable to transfer funds due to non-UK related sanctions. In accordance with the Group's policy, the credit loss relating to the customer in Venezuela has been recorded in exceptional items due to its size and non-recurring nature.

Taxation relating to exceptional items

Tax charges relating to exceptional items arising in the period were £4.2m (FY18: tax credit of £9.7m).

5 Disposal of paper business

On 26 March 2018 prior to the external sale, the Group transferred the trade and assets of the paper business into a newly created whollyowned subsidiary Portals De La Rue Limited. The Group completed the sale of Portals De La Rue Limited to EPIRIS Fund II on 29 March 2018. Under the terms of the agreement De La Rue received £60.3m cash upon completion of the transaction plus £6.6m in loan notes issued by the purchaser. Of the £6.6m of loan notes received, £2.6m was immediately converted to a preference share holding and £0.2m to an ordinary share holding of 10% in Mooreco Limited, a parent company of the purchasers. An additional £3.0m was estimated as being receivable relating to a closing working capital adjustment. The interest earned in FY19 has not been paid and has been accrued and added to the value of the loan note and preference share instruments held and is included in the total value presented on the balance sheet (as an other financial asset) at 30 March 2019 of £7.3m.

The carrying amounts of assets and liabilities as at the date of sale (29 March 2018) post-impairment of disposal group (referred to in note 4 above) totalled £67.9m.

The Group's paper business did not meet the IFRS 5 definition of a discontinued operation and as such its results have been included within continuing operations.

5 Disposal of paper business continued

Disposal consideration included an estimate for total amounts payable under the recompense contract provision of £2.0m. As part of the sale of the paper business the Company agreed to compensate the buyer, within certain limits, in the event of certain commercial outcomes arising which were prejudicial to the buyer. An amount of £2.0m was recognised in the 31 March 2018 balance sheet date to reflect the risk weighted exposure to the Company from within the overall range of possible outcomes. In the current period, an additional loss on disposal of £3.0m has been recorded due to the finalisation of the disposal accounting as the final amount received under the working capital adjustment is now known in addition to the impact of the update to the estimate of the recompense liability. The provision for recompense liability is included within other provisions in note 19.

6 Interest income and expense

Accounting policies

Interest income/expense is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash flows through the expected life of the financial asset/liability to the net carrying amount of that asset/liability.

	2019	2018
Recognised in the income statement	£m	£m
Interest income:		
 Interest on loan notes and preference shares 	0.5	_
– Cash and cash equivalents	0.1	_
	0.6	0
Interest expense:		
– Bank loans	(3.4)	(4.2
 Other, including amortisation of finance arrangement fees 	(1.1)	0.4
Total interest expense calculated using the effective interest method	(4.5)	(3.8
Retirement benefit obligation net finance expense (note 24)	(2.1)	(5.6

All finance income and expense arises in respect of assets and liabilities not restated to fair value through the income statement.

Interest due on the loan notes and preference shares relates to interests held in Mooreco Limited (obtained as part of the considered for the Portals paper disposal). The loan notes and preference shares are included in the balance sheet as Other Financial Assets. In accordance with the terms of the instruments, the interest has not been paid in the year but accrued and added to the value of the Other Financial Asset.

The gain to the income statement in respect of the ineffective portion of derivative financial instruments was £nil (FY18: £nil).

7 Taxation

Accounting policies

The tax expense included in the income statement comprises current and deferred tax. Current tax is the expected tax payable on the taxable income for the year, including adjustments in respect of prior periods, using tax rates enacted or substantively enacted by the balance sheet date. Tax is recognised in the income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Deferred tax is provided on temporary differences arising between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is measured using tax rates that have been enacted or substantively enacted by the balance sheet date and that are expected to apply when the asset is realised or the liability is settled.

Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from goodwill not deductible for tax purposes, or result from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax is provided on temporary differences arising on investments in subsidiaries, associates and joint ventures, except where the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and deferred tax liabilities are only offset to the extent that there is a legally enforceable right to offset current tax assets and current tax liabilities, they relate to taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis or to realise an asset and settle a liability simultaneously.

7 Taxation continued

	2019 £m	2018 £m
Consolidated income statement		
Current tax		
UK corporation tax:		
- Current tax	3.8	6.8
 Adjustment in respect of prior years 	(0.3)	(1.7)
	3.5	5.1
Overseas tax charges:		
- Current year	2.2	2.9
 Adjustment in respect of prior years 	(0.3)	(1.4)
	1.9	1.5
Total current income tax charge	5.4	6.6
Deferred tax:		
 Origination and reversal of temporary differences, UK 	(1.6)	10.6
 Origination and reversal of temporary differences, overseas 	0.6	(1.6)
Total deferred tax charge/(credit)	(1.0)	9.0
Income tax expense reported in the consolidated income statement in respect of continuing operations	4.8	16.8
Income tax expense/(credit) in respect of discontinued operations (note 2)	(0.4)	(1.2)
Total income tax charge in the consolidated income statement	4.4	15.6
Tax on continuing operations attributable to:		
- Ordinary activities	8.7	8.3
 Amortisation of acquired intangible assets 	0.3	(1.2)
– Exceptional items	(4.2)	9.7
Consolidated statement of comprehensive income:		
 On remeasurement of net defined benefit liability 	(1.5)	10.4
– On cash flow hedges	(0.2)	(0.5)
 On foreign exchange on quasi-equity balances 	(0.5)	0.1
Income tax (credit)/charge reported within other comprehensive income	(2.2)	10.0
Consolidated statement of changes in equity:		
- On share options	0.3	0.2
Income tax charge reported within equity	0.3	0.2

The tax on the Group's consolidated profit before tax differs from the UK tax rate of 19% as follows:

	2019				2018			
	Before exceptional items £m	Exceptional items £m	Movement on acquired intangibles £m	Total £m	Before exceptional items £m	Exceptional items £m	Movement on acquired intangibles £m	Total £m
Profit before tax	54.2	(27.9)	(0.7)	25.6	53.4	60.9	(0.7)	113.6
Tax calculated at UK tax rate of 19% (FY18: 19%)	10.3	(5.3)	(0.1)	4.9	10.1	11.6	(0.1)	21.6
Effects of overseas taxation	(1.1)	-	-	(1.1)	0.5	_	_	0.5
(Credits)/charges not allowable for tax purposes (Utilisation)/increase in unrecognised	(0.6)	1.6	-	1.0	(0.1)	0.7	_	0.6
tax losses	-	-	_	_	(0.5)	(0.8)	_	(1.3)
Adjustments in respect of prior years	-	(1.1)	0.4	(0.7)	(1.8)	(0.3)	_	(2.1)
Change in UK and overseas tax rate	0.1	0.6	-	0.7	0.1	(1.5)	(1.1)	(2.5)
Tax charge/(credit)	8.7	(4.2)	0.3	4.8	8.3	9.7	(1.2)	16.8

The underlying effective tax rate was 16.1% (FY18: 15.5%.

8 Earnings per share

Accounting policies

Basic earnings per share is calculated by dividing the profit attributable to equity shareholders by the weighted average number of ordinary shares outstanding during the year, excluding those held in the employee share trust which are treated as cancelled.

For diluted earnings per share, the weighted average number of ordinary shares in issue is adjusted for the impact of the dilutive effect of share options.

The Directors are of the opinion that the publication of the adjusted earnings per share excluding paper, before exceptional items, is useful to readers of the accounts as it gives an indication of underlying business performance.

	2019 Continuing operations pence per share	2019 Discontinued operations pence per share	2019 Total pence per share	2018 Continuing operations pence per share	2018 Discontinued operations pence per share	2018 Total pence per share
IFRS earnings per share						
Basic earnings per share	18.8	(2.3)	16.5	93.7	(1.8)	91.9
Diluted earnings per share	18.8	(2.3)	16.5	92.8	(1.8)	91.0
Adjusted earnings per share – excluding paper						
Basic earnings per share	42.9	n/a	n/a	38.2	n/a	n/a

Reconciliations of the earnings and weighted average number of shares used in the calculations are set out below:

Earnings

	2019 Continuing operations £m	2018 Continuing operations £m
Earnings for basic and diluted earnings per share	19.4	95.4
Amortisation of acquired intangible assets	0.7	0.7
Exceptional items	27.9	(60.9)
Less: tax on amortisation of acquired intangibles	0.3	(1.2)
Less: tax on exceptional items	(4.2)	9.7
Earnings for adjusted earnings per share	44.1	43.7

Weighted average number of ordinary shares

	2019 Number	2018 Number
	m	m
For basic earnings per share	102.9	101.9
Dilutive effect of share options	0.3	0.9
For diluted earnings per share	103.2	102.8

9 Equity dividends

Final dividends proposed by the Board of Directors and unpaid at the year end are not recognised in the financial statements until they have been approved by the shareholders at the annual general meeting. Interim dividends are recognised in the period that they are paid.

	2019 £m	2018 £m
Final dividend for the period ended 25 March 2017 of 16.7p paid on 30 June 2017	-	17.0
Interim dividend for the period ended 31 September 2017 of 8.3p paid on 3 January 2018	-	8.4
Final dividend for the period ended 31 March 2018 of 16.7p paid on 3 August 2018	17.1	-
Interim dividend for the period ended 29 September 2018 of 8.3p paid on 3 January 2019	8.6	_
	25.7	25.4

A final dividend per equity share of 16.7p has been proposed for the period ended 30 March 2019. If approved by shareholders the dividend will be paid on 3 August 2019 to ordinary shareholders on the register at 6 July 2019.

10 Property, plant and equipment

Accounting policies

Property, plant and equipment are stated at cost, less accumulated depreciation and any accumulated provision for impairment in value. Assets in the course of construction are included in property, plant and equipment on the basis of expenditure incurred at the balance sheet date.

No depreciation is provided on freehold land. Freehold and long leasehold buildings are depreciated over their estimated useful economic lives of 50 years. Other leasehold interests are depreciated over the lease term.

Plant and machinery are depreciated over their estimated useful lives which typically range from 10 to 20 years. Fixtures and fittings and motor vehicles are depreciated over their estimated useful lives which typically range from two to 15 years. No depreciation is provided for assets in the course of construction until they are ready for use.

Depreciation methods, residual values and useful lives are reviewed at least at each financial year end, taking into account commercial and technical obsolescence as well as normal wear and tear, provision being made where the carrying value exceeds the recoverable amount.

	Land and buildings £m	Plant and machinery £m	Fixtures and fittings and Motor Vehicles £m	In course of construction £m	Total £m
Cost					
At 25 March 2017	64.2	381.3	23.9	19.7	489.1
Exchange differences	-	(0.1)	-	-	(0.1)
Additions	0.2	1.0	0.1	12.9	14.2
Transfers from assets in the course of construction	1.7	16.4	1.6	(19.7)	-
Reclassification	4.0	(17.9)	4.9	3.1	(5.9)
Disposals	-	(2.5)	(0.1)	(0.9)	(3.5)
Disposal of subsidiary	(21.0)	(135.8)	(3.1)	(3.7)	(163.6)
At 31 March 2018	49.1	242.4	27.3	11.4	330.2
Exchange differences	(0.2)	(2.1)	(0.1)	_	(2.4)
Additions	1.1	9.7	1.0	8.5	20.3
Transfers from assets in the course of construction	0.1	10.2	0.8	(11.1)	-
Disposals	-	(17.2)	(0.3)	_	(17.5)
At 30 March 2019	50.1	243.0	28.7	8.8	330.6
Accumulated depreciation					
At 25 March 2017	28.7	277.1	16.1	-	321.9
Exchange differences	-	(0.3)	_	-	(0.3)
Depreciation charge for the year	1.9	12.7	7.3	-	21.9
Reclassification	1.6	(5.5)	(2.0)	_	(5.9)
Disposals	_	(2.0)	(0.1)	_	(2.1)
Disposal of subsidiary	(5.7)	(109.5)	(2.9)	-	(118.1)
At 31 March 2018	26.5	172.5	18.4	_	217.4
Exchange differences	(0.2)	(1.8)	_	_	(2.0)
Depreciation charge for the year	1.8	13.2	1.7	_	16.7
Disposals	-	(17.0)	(0.3)	_	(17.3)
Impairments	-	0.7	_	_	0.7
At 30 March 2019	28.1	167.6	19.8	-	215.5
Net book value at 30 March 2019	22.0	75.4	8.9	8.8	115.1
Net book value at 31 March 2018	22.6	69.9	8.9	11.4	112.8
Net book value at 25 March 2017	35.5	104.2	7.8	19.7	167.2

11 Intangible assets

Other intangible assets

Intangible assets purchased separately, such as software licences that do not form an integral part of related hardware, are capitalised at cost less accumulated amortisation and impairment losses. Software intangibles are amortised on a straight line basis over the shorter of their useful economic life or their licence period at rates which vary between three and five years.

Expenditure incurred in the development of products or enhancements to existing product ranges is capitalised as an intangible asset if the recognition criteria in IAS 38 'Intangible Assets' have been met. Development costs not meeting these criteria are expensed in the income statement as incurred. Capitalised development costs are amortised on a straight line basis over their estimated useful economic lives, which vary between five and 10 years, once the product or enhancement is available for use. Product research costs are written off as incurred.

Distribution rights are capitalised at cost less accumulated amortisation and impairment losses and are amortised over their useful economic lives as determined by the life of the products to which they relate.

Intangible assets purchased through a business combination are recognised separately from goodwill and are initially recognised at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial acquisition, intangible assets acquired through a business combination are reported at cost less accumulated amortisation and impairment losses.

Intellectual property recorded on the balance sheet relates to the acquisition of De La Rue Authentication Solutions Inc. and is amortised over its expected life of 15 years. Customer relationships, relating to those acquired in the acquisition of De La Rue Authentication Solutions Inc. are amortised over their expected lives of 10 to 15 years. Trade names relating to the acquisition of De La Rue Authentication Solutions Inc. are amortised over their expected lives of 15 years.

Assets in course of construction relates to internally generated software which is not yet completed.

Goodwill relates to the acquisition in FY17 of De La Rue Authentication Inc. (previously DuPont Authentication Inc). The goodwill has been tested for impairment during the year as IAS 36 requires annual testing for assets with an indefinite life. For the purposes of impairment testing the Cash Generating Unit (CGU) for the Goodwill has been determined as the De La Rue Authentication entity as a whole. This is consistent with the fact that the entity is not fully integrated into the Group and the integrated nature of the Intellectual Property and other assets which collectively generate cash flows. The key sensitivities in the impairment test are discount rate, future growth in revenue and the level of profit margin generated by De La Rue Authentication. Based on the impairment test performed no impairment of the goodwill is considered necessary.

	Goodwill £m	Development costs £m	Software assets £m	Distribution rights £m	Intellectual property £m	Customer relationships £m	Trade names £m	In course of construction £m	Total £m
Cost									
At 25 March 2017	8.8	23.2	10.0	0.1	3.6	4.4	0.2	_	50.3
Exchange differences	(0.8)	-	-	-	(0.5)	(0.7)	-	_	(2.0)
Reclassification	_	(3.9)	(1.7)	_	_	_	_	_	(5.6)
Additions	-	3.6	1.2	-	-	_	-	_	4.8
Disposal of subsidiary	_	(1.3)	_	_	_	_	_	_	(1.3)
At 31 March 2018	8.0	21.6	9.5	0.1	3.1	3.7	0.2	-	46.2
Exchange differences	0.6	-	-	-	0.1	0.1	-	_	0.8
Additions	_	-	0.7	_	_	_	_	6.7	7.4
Reclassification	_	(3.5)	0.3	_	_	_	_	3.2	_
At 30 March 2019	8.6	18.1	10.5	0.1	3.2	3.8	0.2	9.9	54.4
Accumulated amortisation									
At 25 March 2017	-	12.8	6.0	0.1	0.1	_	-	_	19.0
Reclassification	-	(3.7)	(1.0)	-	_	_	-	_	(4.8)
Exchange differences	-	-	_	-	-	_	-	_	_
Amortisation for the year	-	1.8	0.8	-	0.2	0.5	-	_	3.3
Disposal of subsidiary	-	(0.9)	_	-	_	_	_	—	(0.9)
At 31 March 2018	-	10.0	5.8	0.1	0.3	0.5	-	-	16.7
Exchange differences	-	-	-	-	-	_	-	_	_
Amortisation for the year	-	1.6	1.0	-	0.2	0.4	-	_	3.2
Impairment	-	0.4	_	-	_	_	_	0.8	1.2
At 30 March 2019	-	12.0	6.8	0.1	0.5	0.9	-	0.8	21.1
Carrying value at 30 March 2019	8.6	6.1	3.7	-	2.7	2.9	0.2	9.1	33.3
Carrying value at 31 March 2018	8.0	11.6	3.7	_	2.8	3.2	0.2	-	29.5
Carrying value at 25 March 2017	8.8	10.4	4.0	-	3.5	4.4	0.2		31.3

11 Intangible assets continued

Accounting policies

Impairment of intangible assets

Intangible assets that are subject to amortisation are reviewed for impairment whenever events or circumstances indicate that the carrying value may not be recoverable. In addition, goodwill is tested at least annually for impairment. Impairment tests are performed for all Cash Generating Units (CGUs) to which goodwill has been allocated at the balance sheet date or whenever there is indication of impairment.

An impairment loss is recognised immediately in the income statement for the amount by which the asset's carrying value exceeds its recoverable amount, the latter being the higher of the asset's fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

In testing intangible assets for impairment, a number of assumptions must be made when calculating future cash flows. These assumptions include growth in customer numbers, market size and sales prices and volumes, all of which will determine the future cash flows.

12 Inventories

Accounting policies

Inventories and work in progress are valued at the lower of cost and net realisable value. Cost is determined on a weighted average cost basis and comprises directly attributable purchase and conversion costs, including direct labour and an allocation of production overheads based on normal operating capacity that have been incurred in bringing those inventories to their present location and condition. Net realisable value is the estimated selling price less estimated costs of completion and selling costs.

	2019 £m	2018 £m
Raw materials	18.7	17.4
Work in progress	12.9	9.8
Finished goods	10.7	9.8
	42.3	37.0

The replacement cost of inventories is not materially different from original cost.

An income statement charge in respect of the recognition of inventory provisions of £1.7m was recognised in operating expenses – ordinary in FY19 (FY18: £0.8m).

13 Trade and other receivables

Accounting policies

Trade receivables that do not contain a significant financing component are recognised at the transaction price and other receivables are measured at amortised cost. Trade and other receivables are recognised net of allowance for ECL. In accordance with IFRS 9, the Group calculates an allowance for potentially uncollectable accounts receivable balances using the ECL model and follows the simplified approach. The Group has calculated the ECL by segmenting its accounts receivable balances into different segments representing the risk levels applying to those customer groupings and thus allowing for the calculation of the ECL by applying the expected loss rate to each segment. The loss rates applied to each segment are based on the Group historical experience of credit losses in addition to available knowledge of potential future credit risk based on available data such as country credit ratings. For further details on the adoption of IFRS 9, please see page 109. This has been calculated using the methodology set out in note 1. The Group reviews the account receivable ledger on a monthly basis to identify if there are any collectability issues which might require the recognition of an expected credit loss allowance (ie a specific bad debt provision) in addition to the expected credit loss allowance calculated based on historical experience. The Group's policy for managing credit risk is set out in note 14.

	2019 £m	2018 £m
Trade receivables	119.2	68.8
Provision for impairment	(25.3)	(5.5)
Net trade receivables	93.9	63.3
Other receivables	17.1	22.3
Prepayments and accrued income ¹	3.4	13.5
	114.4	99.1

Note:

In 2019 accrued income is presented on the face of the balance sheet as 'contract assets' as required by IFRS 15.

13 Trade and other receivables continued

The Group has three customers that account for approximately 28% of the trade receivables at 30 March 2019.

The ageing of trade and other receivables (excluding prepayments) at the reporting date was:

		ECL		
	Gross	allowance	Gross	Provision*
	2019	2019	2018	2018
	£m	£m	£m	£m
Not past due	77.5	(0.3)	31.0	-
Past due 0-30 days	16.7	(1.0)	32.3	_
Past due 31-120 days	20.5	(11.0)	7.3	_
Past due more than 120 days	21.6	(13.0)	15.2	(5.5)
	136.3	(25.3)	85.8	(5.5)

* Determined under IAS 37.

The provision for impairment in respect of trade receivables is used to record losses unless the Group is satisfied that no recovery of the amount owing is possible; at that point the amounts considered irrecoverable are written off against the financial asset directly.

The movement in the allowance for impairment in respect of trade receivables during the year was as follows:

	2019	2018
	£m	£m
Balance at beginning of year	(5.5)	(3.0)
Impairment losses recognised	(24.2)	(2.5)
Impairment losses reversed	4.4	-
Balance at end of year	(25.3)	(5.5)

Impairment losses recognised in the period include £18.1m related to Venezuela as referred to in the front half of this Annual Report and Accounts.

There is no expected credit loss on contract assets.

14 Financial risk Financial risk management

Overview

The Group's activities expose it to a variety of financial risks, the most significant of which are liquidity risk, market risk and credit risk.

The Group's financial risk management policies are established and reviewed regularly to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. The use of financial derivatives is governed by the Group's risk management policies approved by the Board of Directors, which provide written principles on the use of financial derivatives consistent with the Group's risk management strategy. The Group's treasury department is responsible for the management of these financial risks faced by the Group.

Group treasury identifies, evaluates and in certain cases hedges financial risks in close cooperation with the Group's operating units. Group treasury provides written principles for overall financial risk management as well as policies covering specific areas, such as foreign exchange risk, interest rate risk, use of derivative financial instruments and the investment of excess liquidity.

Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities where due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group manages this risk by ensuring that it maintains sufficient levels of committed borrowing facilities and cash and cash equivalents. The level of headroom needed is reviewed annually as part of the Group's planning process.

A maturity analysis of the carrying amount of the Group's borrowings is shown below in the reporting of financial risk section together with associated fair values.

Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the Group's income or the value of its holdings of financial instruments. The Group uses a range of derivative instruments, including forward contracts and swaps to hedge its risk to changes in foreign exchange rates and interest rates with the objective of controlling market risk exposures within acceptable parameters, while optimising the return. Derivative financial instruments are only used for hedging purposes.

(a) Currency risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar and the euro. Foreign exchange risk arises from future commercial transactions, recognised assets and liabilities, unrecognised firm commitments and investments in foreign operations.

14 Financial risk continued

To manage their foreign exchange risk arising from future commercial transactions and recognised assets and liabilities, entities in the Group use forward contracts, transacted with Group treasury. Foreign exchange risk arises when future commercial transactions or recognised assets or liabilities are denominated in a currency that is not the entity's functional currency. Group treasury is responsible for managing the net position in each currency via foreign exchange contracts transacted with financial institutions.

The Group's risk management policy aims to hedge firm commitments in full, and between 60% and 100% of forecast exposures in each major currency for the subsequent 12 months to the extent that forecast transactions are highly probable.

The Group has certain investments in foreign operations, whose net assets are exposed to foreign currency translation risk. The Group's policy is to manage the currency exposure arising from the net assets of the Group's foreign operations primarily through borrowings denominated in the relevant foreign currencies and through foreign currency swaps.

The Group's policy is not to hedge net investments in subsidiaries or the translation of profits or losses generated in overseas subsidiaries.

(b) Interest rate risk

All material financial assets and liabilities are maintained at floating rates of interest. Where the Group has forecast average levels of net debt above £50.0m on a continuing basis, the policy is to use floating to fixed interest rate swaps to fix the interest rate on a minimum of 50% of the Group's forecast average levels of net debt for a period of at least 12 months.

Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment securities.

The Group's exposure to credit risk is influenced by various factors, largely pertaining to the profile of the customer as acknowledged in our IFRS 9 Receivables segmentation, in particular the customer's status as a Government or Banking institution as compared to that of a private or publicly owned entity. Due to the large make up of Government or central banks at around 80% of the Group's revenues, measuring credit risk is largely driven by factors including the country's sovereign rating, historic knowledge, local market insights, and political factors in country and industry credit risk is not an influencing factor. The Group's long standing historic trade with Government and central bank institutions guides strongly towards the lower credit or doubtful debt risk that these customers represent. Where private or publicly owned Business Trade applies, the Business adopts a conventional and in depth trading entity credit review. Where appropriate, letters of credit are used to reduce the credit risk for the Business and where possible advanced payments are also requested.

All credit assignment risk is mitigated through a threshold based sign-off matrix, where larger value credit exposures require multiple and more senior Business sign-off. The Group has processes in place to ensure appropriate credit limits are set for customers and for ensuring appropriate approval is given for the release of products to customers where any perceived risk has been highlighted.

Financial instruments

Derivative financial instruments are recognised at fair value at the date a derivative contract is entered into and are subsequently remeasured to their fair value at each balance sheet date. The gain or loss on subsequent fair value measurement is recognised in the income statement unless the derivative qualifies for hedge accounting when recognition of any resultant gain or loss depends on the nature of the item being hedged.

Cash flow hedges

Changes in the fair value of derivative financial instruments that are designated and are effective as hedges of future cash flows are recognised directly in equity and the ineffective portion is recognised immediately in the income statement. Amounts accumulated in equity are recycled to the income statement in the period in which the hedged item also affects the income statement. However, if the hedged item results in the recognition of a non-financial asset or liability, the amounts accumulated in equity on the hedging instrument are transferred from equity and included in the initial measurement of the cost of the asset or liability. Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, exercised, or no longer qualifies for hedge accounting. At that time, for forecast transactions, any cumulative gain or loss on the hedging instrument recognised in equity is retained in equity until the forecasted transaction occurs. If a hedged transaction is no longer expected to occur, the net cumulative gain or loss recognised in equity is transferred to the income statement. Changes in the fair value of derivative financial instruments that do not qualify for hedge accounting are recognised in the income statement as they arise.

Fair value hedges

For an effective hedge of an exposure to changes in fair value of a recognised asset or liability or an unrecognised firm commitment, the hedged item is adjusted for changes in fair value attributable to the risk being hedged with the corresponding entry in net income. Gains or losses from remeasuring the derivative or, for non-derivatives, the foreign currency component of its carrying value, are recognised in net income.

Embedded derivatives

Derivatives embedded in other financial liability instruments or other non-financial host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contracts and the host contracts are not carried at fair value. Any unrealised gains or losses on such separated derivatives are reported in the income statement within revenue or operating expenses, in line with the host contract.

14 Financial risk continued

Fair values

The fair value of financial assets and liabilities, together with the carrying amounts shown in the balance sheet, are as follows:

	Fair value measurement basis	Total fair value 2019 £m	Carrying amount 2019 £m	Total fair value 2018 £m	Carrying amount 2018 £m
Financial assets					
Trade and other receivables ¹		114.4	114.4	85.8	85.8
Contract assets		24.9	24.9	_	_
Other financial assets ²		7.1	7.1	6.4	6.4
Cash and cash equivalents		12.2	12.2	15.5	15.5
Derivative financial instruments:					
- Forward exchange contracts designated as cash flow hedges	Level 2	2.0	2.0	1.8	1.8
- Short duration swap contracts designated as fair value hedges	Level 2	-	-	0.1	0.1
– Foreign exchange fair value hedges – other economic hedges	Level 2	1.2	1.2	1.3	1.3
- Embedded derivatives	Level 2	1.0	1.0	0.4	0.4
 Interest rate swaps 	Level 2	-	-	_	_
Total financial assets		162.8	162.8	111.3	111.3
Financial liabilities					
Unsecured bank loans and overdrafts ³		(119.7)	(119.7)	(65.4)	(65.4)
Trade and other payables ⁴		(170.3)	(170.3)	(151.9)	(151.9)
Derivative financial instruments:					
- Forward exchange contracts designated as cash flow hedges	Level 2	(4.7)	(4.7)	(3.2)	(3.2)
- Short duration swap contracts designated as fair value hedges	Level 2	(0.5)	(0.5)	(0.2)	(0.2)
- Foreign exchange fair value hedges - other economic hedges	Level 2	(0.8)	(0.8)	(0.4)	(0.4)
- Embedded derivatives	Level 2	(0.8)	(0.8)	(0.6)	(0.6)
 Interest rate swaps 	Level 2	(0.1)	(0.1)	_	-
Total financial liabilities		(296.9)	(296.9)	(221.7)	(221.7)

Notes:

1 Excluding prepayments.

2 Excludes ordinary shares of £0.2m which are accounted for as fair value through profit and loss.

3 The unsecured bank loans and overdrafts above is presented excluding unamortised pre-paid borrowing.

4 Excluding contract liabilities/deferred income and taxes. The prior period comparatives have been restated to include accrued expenses and payments received on account.

	2019 £m	2018 £m
All derivatives		
Hedge of the Group's functional cash flows		
Asset b/f	0.2	0.6
Fair/value (losses)/gains recognised in equity	(0.2)	0.2
Fair/value (losses)/gains recognised in income statement	0.2	(0.6)
Cash settlement on maturity of cash flow hedges		
Asset c/f	0.2	0.2

Fair value measurement basis for derivative financial instruments

Fair value is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest at the reporting date. The valuation bases are classified according to the degree of estimation required in arriving at the fair values. Level 1 valuations are derived from unadjusted quoted prices for identical assets or liabilities in active markets, level 2 valuations use observable inputs for the assets or liabilities other than quoted prices, while level 3 valuations are not based on observable market data and are subject to management estimates. There has been no movement between levels during the current or prior periods.

Forward exchange contracts used for hedging

The fair value of forward exchange contracts has been determined using quoted forward exchange rates at the balance sheet date.

Interest rate swaps

Interest rate swaps are measured by reference to third party bank confirmations and discounted cash flows using the yield curves in effect at the balance sheet date.

Embedded derivatives

The fair value of embedded derivatives is calculated based on the present value of forecast future exposures on relevant sales and purchase contracts and using quoted forward foreign exchange rates at the balance sheet date.

14 Financial risk continued

Determination of fair values of non-derivative financial assets and liabilities

Non-derivative financial assets at fair value through profit or loss are measured at fair value and changes therein, including any interest, are recognised in profit or loss. Directly attributable transaction costs are recognised in profit or loss as incurred.

Non-derivative financial liabilities are initially recognised at fair value less any directly attributable transaction costs. Subsequent to initial recognition, these liabilities are measured at amortised cost using the effective interest method.

Hedge reserves

The hedge reserve balance on 30 March 2019 was (£2.5m), (31 March 2018: (£0.5m)). Net movements in the hedge reserve are shown in the Group statement of changes in equity. Comprehensive income after tax was £2.0m comprising a gain of £2.6m of fair value movements on new and continuing cash flow hedges, a loss of £nil on maturing cash flow hedges for capital expenditure and a £0.5m loss to the income statement to match the recognition of the related cash flows in effective cash flow hedge relationships. Deferred tax on the net gain of £2.3m amounted to £0.3m. Hedge reserve movements in the income statement were as follows:

	Revenue £m	Operating expense £m	Interest expense £m	Total £m
30 March 2019				
 Maturing cash flow hedges 	(0.3)	(0.2)	-	(0.5)
 Ineffectiveness on de-recognition of cash flow hedges 	0.1	-	-	0.1
	(0.2)	(0.2)	-	(0.4)
31 March 2018				
 Maturing cash flow hedges 	(0.4)	2.2	_	1.8
 Ineffectiveness on de-recognition of cash flow hedges 	-	_	_	_
	(0.4)	2.2	_	1.8

The ineffective portion of fair value hedges that was recognised in the income statement amounted to nil (FY18: £nil). The ineffective portion of cash flow hedges that was recognised in the income statement within sales was a £0.1m gain (FY18: loss of £0.9m).

Liquidity risk

The following are the contractual undiscounted cash flow maturities of financial liabilities, including contractual interest payments and excluding the impact of netting agreements.

30 March 2019	Due within 1 year £m		Due between 2 and 5 years £m		Impact of discounting and netting £m	Carrying amount £m
Non-derivative financial liabilities						
Unsecured bank loans and overdrafts	119.7	-	-	119.7	-	119.7
Trade and other payables	170.3	-	-	170.3	_	170.3
Derivative financial liabilities						
Gross amount payable from currency derivatives:						
 Forward exchange contracts designated as cash flow hedges Short duration swap contracts designated 	156.7	-	-	156.7	(152.0)	4.7
as fair value hedges	70.3	-	-	70.3	(69.8)	0.5
– Fair value hedges – other economic hedges	62.1	0.1	15.8	78.0	(77.2)	0.8
Interest rate swaps	0.1	-	-	0.1	-	0.1
	579.2	0.1	15.8	595.1	(299)	296.1

14 Financial risk continued

Liquidity risk continued

31 March 2018	Due within 1 year £m	Due between 1 and 2 years £m	Due between 2 and 5 years £m	Total undiscounted cash flows £m	Impact of discounting and netting £m	Carrying amount £m
Non-derivative financial liabilities						
Unsecured bank loans and overdrafts	65.4	_	_	65.4	_	65.4
Trade and other payables	151.9	_	_	151.9	_	151.9
Derivative financial liabilities						
Gross amount payable from currency derivatives:						
 Forward exchange contracts designated as cash flow hedges 	144.9	0.4	_	145.3	(142.1)	3.2
 Short duration swap contracts designated as fair value hedges 	40.3	_	_	40.3	(40.1)	0.2
– Fair value hedges – other economic hedges	61.6	_	-	61.6	(61.2)	0.4
Interest rate swaps						
	464.1	0.4	-	464.5	(243.4)	221.1

The following are the contractual undiscounted cash flow maturities of financial assets, including contractual interest receipts and excluding the impact of netting agreements.

30 March 2019	Due within 1 year £m	Due between 1 and 2 years £m	Due between 2 and 5 years £m	Due after 5 years £m	Total undiscounted cash flows £m	Impact of discounting and netting £m	Carrying amount £m
Non-derivative financial assets							
Cash and cash equivalents	12.2	-	-	_	12.2	_	12.2
Trade and other receivables	135.9	-	-	-	135.9	-	135.9
Contract assets	24.9	-	-	-	24.9	-	24.9
Other financial assets ¹	-	-	-	7.1	-	-	7.1
Derivative financial assets							
Gross amount receivable from currency derivatives:Forward exchange contracts designated as cash flow hedges	79.5	1.6	_	_	81.1	(79.1)	2.0
 Short duration swap contracts designated as fair value hedges 	17.0	_	_	_	17.0	(17.0)	_
– Fair value hedges – other economic hedges	90.6	23.4	3.4	-	117.4	(116.2)	1.2
Interest rate swaps							
	360.1	25.0	3.4	7.1	388.5	(212.3)	183.3

Note: 1 Excludes ordinary shares of £0.2m which are accounted for as fair value through profit and loss.

	Due within 1 year	Due between 1 and 2 years	Due between 2 and 5 years	Total undiscounted cash flows	Impact of discounting and netting	Carrying amount
31 March 2018	£m	£m	£m	£m	£m	£m
Non-derivative financial assets						
Cash and cash equivalents	15.5	_	_	15.5	_	15.5
Trade and other receivables	85.2	_	_	85.2	_	85.2
Derivative financial assets						
Gross amount receivable from currency derivatives:						
 Forward exchange contracts designated as cash flow hedges 	119.2	7.3	_	126.5	(124.7)	1.8
 Short duration swap contracts designated 						
as fair value hedges	37.2	_	_	37.2	(37.1)	0.1
 Fair value hedges – other economic hedges 	69.3	0.7	_	70.0	(68.7)	1.3
Interest rate swaps						
	326.4	8.0	-	334.4	(230.5)	103.9

14 Financial risk continued Liquidity risk continued

The fair value of a hedging derivative is classified as a non-current asset or liability if the remaining maturity of the hedged instrument is more than 12 months and as a current asset or liability if the maturity of the hedged instrument is less than 12 months.

Cash and cash equivalents, trade and other current receivables, bank loans and overdrafts, trade payables and other current liabilities have fair values that approximate to their carrying amounts due to their short term nature.

As at 30 March 2019, the Group has a total of undrawn committed borrowing facilities, all maturing in more than one year, of £156.5m (31 March 2018: £210.0m in more than one year). The amount of loans drawn on the £275.0m facility is £118.5m (31 March 2018: £65.0m). Guarantees of £nil (31 March 2018: £nil) have been drawn using the facility.

The financial covenants require that the ratio of EBIT to net interest payable be greater than four times and the net debt to EBITDA ratio be less than three times. At the period end the specific covenant tests were as follows: EBIT/net interest payable of 12.9 times, net debt/EBITDA of 1.46 times.

Forward foreign exchange contracts

The net principal amounts of the outstanding forward foreign exchange contracts at 30 March 2019 are US dollar 125.6m, euro 35.5m, Swiss franc 32.2m, Japanese yen 53.0m, Canadian dollar 0.5m, Hong Kong dollar 8.5m, Singapore dollar 4.2m, Australian dollar 0.1m and Swedish krona 16.6m.

The net principal amounts outstanding under forward contracts with maturities greater than 12 months are euro 3.9m, US dollar 53.9m and Swiss franc 0.8m. These forward contracts are designated as cash flow hedges or fair value hedges as appropriate.

Gains and losses recognised in the hedging reserve in equity on forward foreign exchange contracts at 30 March 2019 will be released to the income statement at various dates between one month and 24 months from the balance sheet date.

	Notional amount in currency	Notional amount in £m	Maturity	Average forward rate
As at March 2019				
Forward exchange forward contracts				
USD	126.4	(94.9)	2022	1.3314
EUR	(39)	35.2	2021	1.1059
CHF	(29)	22.8	2020	1.2687
31 March 2018				
Forward exchange forward contracts				
USD	34.3	(23.9)	2019	1.4341
EUR	24.3	(21.6)	2019	1.1231
CHF	(28.5)	22.2	2019	1.2855

Notes:

Hedges vs GBP shown only.

Forward sales shown as positive and purchases shown as negative.

Short duration swap contracts

(i) Cash management swaps

The Group uses short duration currency swaps to manage the level of borrowings in foreign currencies. The fair value of cash management currency swaps at 30 March 2019 was £nil (FY18: £nil). Gains and losses on cash management swaps are included in the consolidated income statement.

The principal amounts outstanding under cash management currency swaps at 30 March 2019 are US dollar 11.6m, euro 1.8m, Swiss franc 1.2m, Japanese yen 53.6m, Canadian dollar 0.5m, Hong Kong dollar 1.9m, Mexican peso 2.6m, United Arab Emirates dirham 2.5m, Singapore dollar 0.4m and Swedish krona 0.3m.

(ii) Balance sheet swaps

The Group uses short duration currency swaps to manage the translational exposure of monetary assets and liabilities denominated in foreign currencies. The fair value of balance sheet swaps as at 30 March 2019 was (£0.5m) (FY18: loss £0.1m). Gains and losses on balance sheet swaps are included in the consolidated income statement.

The principal amounts outstanding under balance sheet swaps at 30 March 2019 are US dollar 45.5m, euro 31.4m, Swiss franc 15.2m, South African rand 19.8m.

Embedded derivatives

Embedded derivatives relate to sales and purchase contracts denominated in currencies other than the functional currency of the customer/ supplier, or a currency that is not deemed to be a commonly used currency of the country in which the customer/supplier is based. The net fair value of embedded derivatives at 30 March 2019 was £0.2m (FY18: (£0.2m)).

Gains and losses on fair value hedges

The gains and losses recognised in the year on the Group's fair value hedges were (£0.3m) relating to balance sheet hedges (FY18: loss £0.1m), (£1.6m) relating to other fair value hedges (FY18: loss £8.9m), and £nil relating to cash management hedges (FY18: £nil).

14 Financial risk continued Market risk: Currency risk

Exposure to currency risk

The following significant exchange rates applied during the year:

	Average rate		Reporting date spot rate	
	2019	2018	2019	2018
US dollar	1.32	1.33	1.31	1.41
Euro	1.13	1.13	1.17	1.14

Interest rate risk

At the reporting date the interest rate profile of the Group's interest bearing financial instruments was:

	Carrying amou	nt
	2019 £m	2018 £m
Variable rate instruments		
Financial assets	12.2	15.5
Financial liabilities	(119.7)	(65.4)
	(107.5)	(49.9)

At the year ending 31 March 2019 the Group had £35m of floating to fixed interest rate swaps with financial institutions and with a maturity of November 2019, and £30m of floating to fixed interest rate swaps with financial institutions and with maturities of October and November 2020.

Sensitivity analysis

A change of 100 basis points in interest rates at the reporting date would have increased/(decreased) equity and profit and loss by the amounts shown below. The analysis assumes that all other variables, in particular foreign currency rates, remain constant.

	Profit and I	Profit and loss		
	100bp increase £m	100bp decrease £m	100bp increase £m	100bp decrease £m
Variable rate instruments cash flow sensitivity (net)				
30 March 2019	(0.3)	0.7	-	-
25 March 2018	(0.8)	0.9	_	-

Credit risk

Exposure to credit risk

The carrying amount of financial assets represents the credit exposure at the reporting date. The exposure to credit risk at the reporting date was:

		Carrying amo	ount
	Notes	2019 £m	2018 £m
Trade and other receivables (excluding prepayments)	13	111.0	85.8
Cash and cash equivalents	15	12.2	15.5
Forward exchange contracts used for hedging		3.2	3.2
Embedded derivatives		1.0	0.4
Interest rate swaps		-	-
		127.4	104.9

The maximum exposure to credit risk for trade and other receivables (excluding prepayments) by geographic region was:

	Carrying amoun	t
	2019 £m	2018 £m
UK	27.3	17.2
Rest of Europe	17.1	4.7
The Americas	9.0	15.5
Rest of world	57.6	48.4
	111.0	85.8

14 Financial risk continued

Credit risk continued

The maximum exposure to credit risk for trade and other receivables (excluding prepayments) by type of customer was:

	Carrying amou	int
	2019 £m	2018 £m
Banks and financial institutions	66.7	60.3
Government institutions	34.7	22.4
Other	34.9	3.1
	136.3	85.8

Fair value adjustment to credit risk on derivative contracts

The impact of credit related adjustments being made to the carrying amount of derivatives measured at fair value and used for hedging currency and interest rate risk has been assessed and considered to be immaterial. These derivatives are transacted with investment grade financial institutions. Similarly, the impact of the credit risk of the Group on the valuation of its financial liabilities has been assessed and considered to be immaterial.

Capital management

The Board's policy is to maintain a strong capital base in order to maintain investor, creditor and market confidence and to sustain future development of the business.

The Group finances its operations through a mixture of equity funding and debt financing, which represent the Group's definition of capital for this purpose.

	Note	2019 £m	2018 £m
Total equity attributable to shareholders of the Company		(39.1)	(43.9)
Add back long term pension deficit liability		78.6	89.6
Adjusted equity attributable to shareholders of the Company		39.5	45.7
Net debt	22	107.5	49.9
Group capital		147.0	95.6

The long term pension deficit has been removed as a separate agreement is in place regarding the funding for this deficit which is paid out of cash flows from continuing operations. The Group's debt financing is also analysed in notes 18 and 22.

Included within the Group's net debt are certain cash and cash equivalent balances that are not readily available for use by the Group. These balances are not significant, and are not readily available due to restrictions within some of the countries in which we operate.

Earnings per share and dividend payments are the two measures which, in the Board's view, summarise best whether the Group's objectives regarding equity management are being met. The Group's earnings and dividends per share and relative rates of growth illustrate the extent to which equity attributable to shareholders has changed. Both measures are disclosed and discussed within the strategic report and notes 8 and 9.

The Group's objective is to maximise sustainable long term growth of the earnings per share.

De La Rue's dividend policy is to provide shareholders with a competitive return on their investment, while assuring sufficient reinvestment of profits to enable the Group to achieve its strategy. During the period, the Group invested £40.1m in ongoing research and development expenditure and total capital expenditure. The proposed total dividend for the year is covered 1.7 times. The ratio is calculated as total adjusted earning as per note 8 over the dividend for the year.

The decision to pay dividends, and the amount of the dividends, will depend on, among other things, the earnings, financial position, capital requirements, general business conditions, cash flows, net debt levels and share buyback plans.

There were no changes to the Group's approach to capital management during the year.

15 Cash and cash equivalents

Accounting policies

Cash and cash equivalents comprise bank balances and cash held by the Group and short term deposits with an original maturity of three months or less. Bank overdrafts that are repayable on demand and form part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the cash flow statement.

	2019 £m	2018 £m
Cash at bank and in hand	12.2	15.2
Short term bank deposits	-	0.3
	12.2	15.5

An analysis of cash, cash equivalents and bank overdrafts is shown in the Group cash flow statement.

Certain cash and deposits are of a floating rate nature and are recoverable within three months.

The Group's exposure to interest rate risk and a sensitivity analysis for financial assets and liabilities are disclosed in note 14.

16 Deferred taxation

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority. The offset amounts are as follows:

	2019	2018
	£m	£m
Deferred tax assets	18.4	19.8
Deferred tax liabilities	(3.4)	(3.0)
	15.0	16.8

The gross movement on the deferred income tax account is as follows:

	2019 £m	2018 £m
Beginning of the year	16.8	38.4
Exchange differences	(0.3)	0.4
Income statement credit/(charge)	1.0	(9.0)
Tax credit/(charge) to OCI and equity	(2.5)	(13.0)
End of the year	15.0	16.8

16 Deferred taxation continued

The movement in deferred tax assets and liabilities during the period, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

	Property, plant and equipment £m	Fair value gains (restated) £m	Development costs £m	Other £m	Total £m
Liabilities					
At 25 March 2017	(7.8)	(2.9)	(1.7)	(0.4)	(12.8)
Recognised in the income statement	4.2	1.2	0.1	_	5.5
Recognised in OCI and equity	-	_	_	0.4	0.4
Exchange differences	-	0.3	_	_	0.3
At 31 March 2018	(3.6)	(1.4)	(1.6)	_	(6.6)
Recognised in the income statement	1.5	(0.4)	0.5	(O.1)	1.5
Recognised in OCI and equity	-	_	-	_	-
Exchange differences	-	_	_	_	-
At 30 March 2019	(2.1)	(1.8)	(1.1)	(0.1)	(5.1)

	Share options £m	Retirement benefits £m	Tax losses £m	Other £m	Total £m
Assets					
At 25 March 2017	1.6	41.0	0.4	8.2	51.2
Recognised in the income statement	0.2	(12.8)	(0.2)	(1.7)	(14.5)
Recognised in OCI and equity	(0.6)	(12.9)	_	0.1	(13.4)
Exchange differences	_	_	_	0.1	0.1
At 31 March 2018	1.2	15.3	0.2	6.7	23.4
Recognised in the income statement	(0.2)	0.6	(0.1)	(0.8)	(0.5)
Recognised in OCI and equity	(0.3)	(2.4)	_	0.2	(2.5)
Exchange differences	_	(0.1)	_	(0.2)	(0.3)
At 30 March 2019	0.7	13.4	0.1	5.9	20.1

Other deferred assets and liabilities include tax associated with provisions of £0.6m (FY18: £0.9m) and in respect of overseas tax credits £5.3m (FY18: £5.9m).

Deferred tax assets are recognised for tax losses available to carry forward to the extent that the realisation of the related tax benefit through future taxable profits is probable.

The Group has not recognised deferred tax assets of £6.8m (FY18: £7.2m) in respect of losses amounting to £25.5m (FY18: £26.7m) that can be carried forward against future taxable income. Similarly, the Group has not recognised deferred tax assets of £6.4m (FY18: £8.9m) in respect of overseas tax credits that are carried forward for utilisation in future periods.

Unremitted foreign earnings totalled £168.8m at 30 March 2019 (FY18: £151.3m). Deferred tax liabilities have not been recognised for the withholding tax and other taxes that would be payable on the unremitted earnings of certain subsidiaries where the timing of the reversal can be controlled and it was considered unlikely that dividends would be paid from those subsidiaries.

UK capital losses of £318.0m are carried forward at 30 March 2019 (FY18: £307m). No deferred tax asset has been recognised in respect of these losses.

US tax rate

A reduction in the US federal tax rate from 35% to 21% (effective from January 2018) was substantively enacted on 22 December 2017. This will reduce the US Group's future current tax charge accordingly. The US deferred tax assets and liabilities at 31 March 2019 have been calculated based on the blended federal and state tax rate of 26% based on the substantively enacted rate at the balance sheet date.

UK tax rate

A reduction in the main rate of UK corporation tax from 19% to 17% (effective from April 2020) was substantively enacted on 6 September 2016. This will reduce the UK Group's future current tax charge accordingly. The UK deferred tax assets and liabilities at 30 March 2019 have been calculated based on the rate of 17% (31 March 2017: 17%) substantively enacted at the balance sheet date.

17 Trade and other payables

Accounting policies

Trade and other payables are measured at carrying value which approximates to fair value.

	2019 £m	2018 £m
Current liabilities		
Payments received on account	46.7	29.7
Trade payables	56.6	59.6
Social security and other taxation	4.7	1.0
Deferred income	-	14.1
Accrued expenses	54.4	58.2
Other payables	12.6	4.5
	175.0	167.1

Payments received on account relate to monies received from customers under contract prior to commencement of production of goods or delivery of services.

The Group's exposure to currency and liquidity risk related to trade and other payables is disclosed in note 14.

18 Borrowings

Accounting policies

Borrowings are recognised at amortised cost.

For more information about the Group's exposure to interest rate, foreign currency and liquidity risk, see note 14.

	Currency	Nominal interest rate	Year of maturity	Face value 2019 £m	Carrying amount 2019 £m	Face value 2018 £m	Carrying amount 2018 £m
Current liabilities							
Unsecured bank loans and overdrafts	EUR	_	2019	_	-	_	-
Unsecured bank loans and overdrafts	GBP	2.25%	2019	119.1	119.1	65.0	65.0
Unsecured bank loans and overdrafts	USD	_	2019	_	-	_	-
Unsecured bank loans and overdrafts	Other	_	2019	0.6	0.6	0.4	0.4
Total interest bearing liabilities				119.7	119.7	65.4	65.4

The total interest bearing liabilities above is presented excluding unamortised pre-paid borrowing fees of £1.0m.

As at 30 March 2019, bank overdrafts of £182.8m (FY18: £223.1m) were offset for interest purposes against bank accounts in a credit balance position. Overdrafts are presented net in the balance sheet where there is a right of offset against a cash balance.

As at 30 March 2019, the Group has committed borrowing facilities, all maturing in more than one year, of £275m. Up to £100m of the £275m facility can be utilised for either loans or guarantees.

As the draw downs on these loans are typically rolled over on terms of between one and three months subject to conditions, the borrowings are disclosed as a current liability. This is notwithstanding the long term nature of this facility which expires in December 2021.

19 Provisions for liabilities and charges

Accounting policies

Provisions are recognised when the Group has a present obligation in respect of a past event, it is probable that an outflow of resources will be required to settle the obligation, and where the amount can be reliably estimated. Provisions are measured at the Directors' best estimate of the amount required to settle the obligation at the balance sheet date and are discounted where the time value of money is considered material.

	Restructuring £m	Warranty £m	Other £m	Total £m
At 31 March 2018	0.5	1.7	5.8	8.0
Exchange differences	_	_	0.1	0.1
Charge for the year	1.5	1.3	1.6	4.4
Utilised in year	(2.0)	(0.9)	(2.0)	(4.9)
Released in year	_	(1.6)	(1.8)	(3.4)
At 30 March 2019	-	0.5	3.7	4.2
Expected to be utilised within 1 year	_	0.5	2.7	3.2
Expected to be utilised after 1 year	_	_	1.0	1.0

Restructuring provisions

Restructuring provisions principally related to the manufacturing footprint review announced in December 2015 and the upgrade of our finance systems and processes. A provision was created at the half year for review of our cost base which was reported in HY19. No provisions are held at 30 March 2019 as no balances remain payable under these programmes as they have now completed.

Warranty provisions

Warranty provisions relate to present obligations for defective products and include known claims as well as anticipated claims that had not been reported at the balance sheet date. The provisions are management judgements based on information currently available, past history and experience of the products sold. However, it is inherent in the nature of the business that the actual liabilities may differ from the provisions. The precise timing of the utilisation of these provisions is uncertain but is generally expected to fall within one year.

Other provisions

Other provisions comprise a number of liabilities with varying expected utilisation rates. An amount of £1.3m has been released upon the updated valuation of the recompense clause relating to the paper disposal which has been accounted for as part of the additional loss on disposal recorded within exceptional items in FY19. In addition, an amount of £0.6m has been released from a historical provision for post-retirement benefits following an updated valuation, the impact of which has been recorded within reserves as it is considered to represent an actuarial gain. Charges in the year primarily relate to the recognition of onerous contract provisions for loss-making customer contracts. With the exception of the post-retirement benefit all other provisions are expected to be utilised within one year.

20 Share capital

	2019 £m	2018 £m
Issued and fully paid		
103,796,134 ordinary shares of 44 ⁵² /175pp each (2017/18: 102,389,688 ordinary shares of 44 ⁵² /175p each)	46.6	46.0
111,673,300 deferred shares of 1p each (2017/18: 111,673,300 deferred shares of 1p each)	1.1	1.1
	47.7	47.1

	2019		201	8
	Ordinary shares '000	Deferred shares '000	Ordinary shares '000	Deferred shares '000
Allotments during the year				
Shares in issue at 31 March 2018/25 March 2017	102,390	111,673	101,767	111,673
Issued under Savings Related Share Option Scheme	1,178	-	439	-
Issued under Annual Bonus Plan	149	-	160	-
Issued under Performance Share Plan	79	-	24	-
Shares in issue at 30 March 2019/31 March 2018	103,796	111,673	102,390	111,673

The deferred shares carry limited economic rights and no voting rights. They are unlisted and are not transferable except in accordance with the articles.

21 Share based payments

Accounting policies

The Group operates various equity settled and cash settled option schemes. For equity settled share options, the services received from employees are measured by reference to the fair value of the share options. The fair value is calculated at grant date and recognised in the consolidated income statement, together with a corresponding increase in shareholders' equity, on a straight line basis over the vesting period, based on the numbers of shares that are actually expected to vest, taking into account non-market vesting conditions (including service conditions). Vesting conditions, other than non-market based conditions, are taken into account when estimating the fair value.

For cash settled share options, the services received from employees are measured at the fair value of the liability for options outstanding and recognised in the consolidated income statement on a straight line basis over the vesting period. The fair value of the liability is remeasured at each reporting date and at the date of settlement with changes in fair value recognised in the consolidated income statement.

At 30 March 2019, the Group has a number of share based payment plans, which are described below. The compensation cost and related liability that have been recognised for the Group's share based plans are set out in the table below:

	Expense recognised for	r the year
	2019 £m	2018 £m
Annual Bonus Plan	0.1	0.7
Performance Share Plan	0.4	0.3
Savings Related Share Option Scheme	0.2	1.2
	0.7	2.2

The fair value of share options is estimated at the date of grant using a lattice based option valuation model. The significant assumptions used in the valuation model are disclosed below:

Arrangement	Performance Share Plan	Performance Share Plan	Annual Bonus Plan	Savings Related Share Option Scheme
Dates of current year grants	27 June 2018	28 August 2018	n/a	7 January 2019
Number of options granted	789,161	66,265	n/a	848,773
Exercise price	n/a	n/a	n/a	n/a
Contractual life (years)	9	9	n/a	3
Settlement	Share	Shares	n/a	Shares
Vesting period (years)	3 or 4	3 or 4	n/a	3
Dividend yield	n/a	n/a	n/a	25p pa
Risk free interest rate	n/a	n/a	n/a	0.77% pa
Share price volatility	n/a	n/a	n/a	30% pa
Fair value per option at grant date	551.0	498.0	n/a	0.86

For the Savings Related Share Option Scheme (SAYE) an expected volatility rate of 30% (FY18: 30%) has been used for grants in the period. This rate is based on historical volatility over the last three years to 7 January 2018. The expected life is the average expected period to exercise. The risk free rate of return is the yield on zero coupon UK government bonds of a term consistent with the assumed option life. The rate applied during the year was 0.77% per annum for a period of three years (FY18: 0.51%).

21 Share based payments continued

Reconciliations of option movements over the period to 31 March 2019 for each class of share awards are shown below:

Annual Bonus Plan

For details of the Annual Bonus Plan, refer to the Directors' remuneration report on pages 74 to 93.

	2019 Number of awards '000	2018 Number of awards '000
Share awards outstanding at start of year	160	243
Granted	-	72
Forfeited	(6)	(9)
Vested	(127)	(146)
Expired	-	_
Outstanding at end of year	27	160

During the period the weighted average share price on share awards exercised in the period was 487.04p.

Performance Share Plan

For details of the Performance Share Plan, refer to the Directors' remuneration report on pages 74 to 93.

	2019 Number of awards '000	2018 Number of awards '000
Share awards outstanding at start of year	1,946	1,722
Granted	854	684
Forfeited	(790)	(290)
Vested	(68)	(20)
Expired	-	(150)
Outstanding at end of year	1,942	1,946

During the period the weighted average share price on share awards exercised in the period was 517.93p.

The awards have been allocated based on a share price of 892.90p for the 4 December 2013 grants, 830.00p for the 27 June 2014 grants, 541.00p for the 29 June 2015 grants, 476.95p for the 23 September 2015 grants, 520.85p for the 27 June 2016 grants, 680.10p for the 27 June 2017 grants, 551.00p for the 27 June 2018 grants and 498.00p for the August 2018 grants.

21 Share based payments continued Savings Related Share Option Scheme

The scheme is open to all UK employees. Options are granted at the prevailing market price at the time of the grant (with a discretionary discount to the market price) to employees who agree to save between £5 and the maximum savings amount offered per month over a period of three or five years.

There are no performance conditions attaching to the options. After the three or five year term has expired, employees normally have six months in which to decide whether or not to exercise their options. A pre-vesting forfeiture rate of 10% has been assumed on new options granted in the year based on historic experience.

	2019		2018	3	
	Weighted average exercise price pence per share	Number of options '000	Weighted average exercise price pence per share	Number of options '000	
Options outstanding at start of year	410.18	2,856	395.63	2,944	
Granted	372.67	849	520.26	654	
Forfeited	391.94	(761)	382.74	(86)	
Exercised	357.96	(1,153)	435.60	(464)	
Expired	_	_	513.30	(192)	
Outstanding at end of year	404.76	1,791	410.18	2,856	

The range of exercise prices for the share options outstanding at the end of the year is 372.67p–705.7p (2018: 344.40p–775.34p). The weighted average remaining contractual life of the outstanding share options is 1.92 years (2018: 1.62 years).

During the period the weighted average share price on options exercised in the period was 414.00p.

Market share purchase of shares by Trustee De La Rue Employee Share Ownership Trust

The De La Rue Employee Share Ownership Trust (Trust) is a separately administered trust established to administer shares granted to Executive Directors and senior employees under the various discretionary share option plans established by the Company. Liabilities of the Trust are guaranteed by the Company and the assets of the Trust mainly comprise shares in the Company. Equiom (Guernsey) Limited is the Trustee. The own shares held by the Trust are shown as a reduction in shareholders' funds. The shares will be held at historical rates until such time as they are disposed of. Any profit or loss on the disposal of own shares is treated as a movement in reserves rather than as an income statement item.

The Trustee held no shares at 30 March 2019 (31 March 2018: nil)

22 Analysis of net debt

	2019	2018
	£m	£m
Cash at bank and in hand	12.2	15.2
Short term bank deposits	-	0.3
Bank overdrafts	(0.9)	(0.3)
Total cash and cash equivalents	11.3	15.2
Borrowings due within one year	(118.8)	(65.1)
Net debt	(107.5)	(49.9)

Net debt above is presented excluding unamortised pre-paid borrowing fees of £1.0m (FY18: £1.5m).

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23 Operating leases

Accounting policies

A lease is defined as an agreement whereby the lessor conveys to the lessee the right to use a specific asset for an agreed period of time in return for a payment or a series of payments.

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Rentals payable under operating leases are charged to the income statement on a straight line basis over the lease term. Benefits received and receivable as an incentive to enter into an operating lease are also spread on a straight line basis over the lease term.

	2019 Property £m	2018 Property £m
Total commitments due:		
– Within one year	2.4	3.0
- Between one and five years	6.8	7.6
- Over five years	25.6	25.5
	34.8	36.1

24 Retirement benefit obligations

Accounting policies

The Group operates retirement benefit schemes, devised in accordance with local conditions and practices in the country concerned, covering the majority of employees. The assets of the Group's schemes are generally held in separately administered trusts or are insured. The major schemes are defined benefit pension schemes with assets held separately from the Group. The cost of providing benefits under each scheme is determined using the projected unit credit actuarial valuation method. The major defined benefit pension scheme is based in the UK and is now largely closed to future accrual. The current service cost and gains and losses on settlements and curtailments are included in operating costs in the Group income statement. The interest income on the plan assets of funded defined benefit pension schemes and the imputed interest on pension scheme liabilities are disclosed as retirement benefit obligation net finance expense respectively in the income statement.

Return on plan assets excluding assumed interest income on the assets, changes in the retirement benefit obligation due to experience and changes in actuarial assumptions are included in the statement of comprehensive income in full in the period in which they arise.

The liability recognised in respect of defined benefit pension schemes is the present value of the defined benefit obligation less the fair value of the scheme assets, as determined by actuarial valuations carried out at the balance sheet date.

The Group's contributions to defined contribution plans are charged to the income statement in the period to which the contributions relate.

A trustee board has been appointed to operate the UK defined benefit scheme in accordance with its governing documents and pensions law. The scheme meets the legal requirement for member nominated trustees representation on the trustee board and a professional independent trustee has been appointed as chair of the Board. The members of the trustee board undertake regular training to ensure they are able to fulfil their function as trustees and have appointed professional advisers to give them specialist expertise where required.

The Group has calculated the value of the minimum funding commitments to its schemes and determined that no additional liability under IFRIC 14 is required at 30 March 2019 as the Group has an unconditional right to any surplus. No significant judgements were involved in making this determination.

The Group's formal triennial valuation of the UK defined benefit scheme (the 'Scheme') was finalised in June 2016. The underlying funding deficit was valued at £252m. The Group agreed a revised funding plan with the Trustee to eliminate the deficit over a period of 12 years from 31 March 2016. A new triennial review of the Scheme's valuation is due as at 5 April 2018. The review is ongoing and the Company is engaging with the Trustees on funding arrangements. The existing funding plan agreed in June 2016 will remain in place until the review is concluded.

The cash contributions to the Scheme of £20.5m (FY18: £13.5m) (in addition to the regular contributions outside of the revised funding plan) have been made in the year. From 2019 to 2022 cash contributions will rise from £20.5m by 4% per annum. They will be frozen at £23.0m per year between 2023 and 2028. The Group will continue to pay annual fees of around £1.6m for managing the Scheme in addition to the cash contributions.

In November 2017 the Trustee of the Scheme decided to change indexation of future increases to the Scheme benefits from the RPI to the CPI, effective from April 2018. The decision was made following a request from the Company and a detailed legal review upon which the Trustee concluded that CPI is currently a more suitable index for the calculation of annual increases in the Scheme. This change led to a past service credit of £80.5m reported in the 31 March 2018 full year results which was recorded within exceptional items. The Directors continue to assess any residual impact from this change.

24 Retirement benefit obligations continued

On 26 October 2018, a landmark pension case involving the Lloyds Banking Group's defined benefit pension schemes was handed down by the High Court. The judgement brings some clarity to defined benefit pension schemes in general and requires schemes to equalise pension benefits between men and women relating to GMPs. We estimate the impact of this in relation to the Scheme is £1.7m and this charge has been recorded within exceptional items. The estimate was performed based on method C2 (under the terminology of the High Court Judgement), which compares each member's accumulated benefits, with interest, to the same benefits if the member were the 'opposite sex' and ensuring the higher of the two accumulated amounts has been paid in each year.

In addition during FY19 legal fees of £0.5m have been incurred in the rectification of certain discrepancies identified in the Scheme's rules. The Directors do not consider this to have an impact on the UK defined benefit pension liability at the current time but they are continuing to assess this.

(a) Defined benefit pension schemes

Amounts recognised in the consolidated balance sheet:

	2019 UK £m	2019 Overseas £m	2019 Total £m	2018 UK £m	2018 Overseas £m	2018 Total £m
Equities	101.8	-	101.8	199.9	_	199.9
Bonds	194.4	-	194.4	273.9	_	273.9
Diversified Growth Fund	185.9	-	185.9	208.6	_	208.6
Liability Driven Investment Fund	440.9	-	440.9	230.1	_	230.1
Multi Asset Credit	74.2	-	74.2	52.2	_	52.2
Other	7.6	-	7.6	15.3	_	15.3
Fair value of scheme assets	1,004.8	-	1,004.8	980.0	-	980.0
Present value of funded obligations	(1,076.4)	-	(1,076.4)	(1,061.1)	_	(1,061.1)
Funded defined benefit pension schemes	(71.6)	-	(71.6)	(81.1)	-	(81.1)
Present value of unfunded obligations	(5.2)	(1.8)	(7.0)	(6.5)	(2.0)	(8.5)
Net liability	(76.8)	(1.8)	(78.6)	(87.6)	(2.0)	(89.6)

Amounts recognised in the consolidated income statement:

	2019 UK £m	2019 Overseas £m	2019 Total £m	2018 UK £m	2018 Overseas £m	2018 Total £m
Included in employee benefits expense:						
- Current service cost	-	-	-	_	(0.5)	(0.5)
- Past service cost ¹	(1.7)	-	(1.7)	80.5	_	80.5
- Administrative expenses and taxes	(2.7)	-	(2.7)	(2.3)	_	(2.3)
Included in interest on retirement benefit obligation net finance expense:						
 Interest income on scheme assets 	25.6	-	25.6	26.7	_	26.7
- Interest cost on liabilities	(27.7)	-	(27.7)	(32.3)	_	(32.3)
Retirement benefit obligation net finance expense	(2.1)	-	(2.1)	(5.6)	_	(5.6)
Total recognised in the consolidated income statement	6.5	-	6.5	72.6	_	72.6
Return on scheme assets excluding assumed interest income	26.5	-	26.5	21.1	_	21.1
Remeasurement (losses)/gains on defined benefit pension obligations	(31.5)	0.2	(31.3)	40.4	0.1	40.5
Amounts recognised in other comprehensive income	(5.0)	0.2	(4.8)	61.5	0.1	61.6

Note:

Past service cost in FY19 relates to GMP adjustment, FY18 relates to change in CPI indexation methodology.

Major categories of scheme assets as a percentage of total scheme assets:

	2019 UK %	2019 Overseas %	2019 Total %	2018 UK %	2018 Overseas %	2018 Total %
Equities	10	-	10	20.0	_	20.0
Bonds	19	_	19	28.0	_	28.0
Diversified Growth Fund	18	-	18	21.0	_	21.0
Liability Driven Investment Fund	44	_	44	24.0	_	24.0
Multi Asset Credit	8	-	8	5.0	_	5.0
Other	1	-	1	2.0	-	2.0

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24 Retirement benefit obligations continued (a) Defined benefit pension schemes continued

The Diversified Growth Fund is a diversified asset portfolio which includes investments in equities, emerging market bonds, property, high yield credit and structured finance and smaller holdings in other asset classes. The Liability Driven Investment (LDI) fund consists of fixed interest bond holdings (approximately 49%), index linked bond holdings (approximately 37%) and cash (approximately 14%). Interest rate swaps and floating rate notes are employed to complement the role of the LDI fund for liability risk management. Derivatives have been valued on a mark to market basis. The LDI is designed to proportionally counterbalance the effect/impact of a decrease/increase in interest rates/ inflation on 50% of the funded obligations. The Multi Asset Credit Fund invests in a variety of debt instruments.

Multi Asset Credit, Diversified Growth Funds and LDI asset categories include certain assets which are not quoted in an active market and are stated at fair value estimates provided by the manager of the investment fund.

Other UK assets comprise cash, interest rate swaps and floating rate notes.

Principal actuarial assumptions:

	2019 UK %	2019 Overseas %	2018 UK %	2018 Overseas %
Discount rate	2.40	-	2.65	_
CPI inflation rate	2.05	-	2.00	_
RPI inflation rate	3.15	-	3.10	_

The financial assumptions adopted as at 30 March 2019 reflect the duration of the scheme liabilities which has been estimated to be 16 years assuming CPI linked benefits.

At 30 March 2019 mortality assumptions were based on tables issued by Club Vita, with future improvements in line with the CMI model, CMI_2018 (2018: CMI_2017) with a smoothing parameter of 7.5 and a long term future improvement trend of 1.25% per annum (2017/18: long term rate of 1.25% per annum). The resulting life expectancies within retirement are as follows:

		2019	2018
Aged 65 retiring immediately (current pensioner)	Male	22.0	22.4
	Female	23.3	23.8
Aged 50 retiring in 17 years (future pensioner)	Male	22.9	22.8
	Female	24.6	24.9

The defined benefit pension schemes expose the Group to the following main risks:

Mortality risk – An increase in the life expectancy of members will increase the liabilities of the schemes. The mortality assumptions are reviewed regularly, and are considered appropriate.

Interest rate risk – A decrease in bond yields will increase the liabilities of the scheme. Liability driven investment strategies are used to hedge part of this risk.

Investment risk – The value of pension scheme assets vary with changes in interest rates, inflation expectations, credit spreads, exchange rates, and equity and property prices. There is a risk that asset returns are volatile and that the value of pension scheme assets may not move in line with changes in pension scheme liabilities. To mitigate against investment risk the pension scheme invests in derivatives which aim to hedge a proportion of the movements in assets and liabilities. The pension scheme invests in a wide range of assets to provide diversification in order to reduce the risk that a single investment or type of asset class could have a materially adverse impact on total scheme assets. The investment strategy and performance of investment funds are reviewed regularly to ensure the asset strategy of the pension schemes continues to be appropriate.

Inflation risk – The liabilities of the scheme are linked to inflation. An increase in inflation will result in an increase in liabilities. There are caps in place for UK scheme benefits to mitigate the risk of extreme increases in inflation. Liability driven investment strategies are used to hedge part of this risk. Any increase in the retirement benefit obligation could lead to additional funding obligations in future years.

The table below provides the sensitivity of the liability in the scheme to changes in various assumptions:

Assumption change	Approximate impact on liability
0.25% decrease in discount rate	Increase in liability of c£43m
0.25% increase in CPI inflation rate	Increase in liability of c£18m
Increasing life expectancy by one year	Increase in liability of c£49m

The liability sensitivities have been derived using projected cash flows for the Scheme valued using the membership profile as at 5 April 2015 and assumptions chosen for the 2019 year end. The sensitivity analysis does not allow for changes in scheme membership since the 2015 actuarial valuation or the impact of the Scheme or Group's risk management activities in respect of interest rate and inflation risk on the valuation of the Scheme assets.

24 Retirement benefit obligations continued (a) Defined benefit pension schemes continued

The largest defined benefit pension scheme operated by the Group is in the UK. The Group's formal triennial funding valuation of the UK defined benefit pension scheme was finalised in June 2016. The underlying funding deficit as at 5 April 2015 was valued at £252m.

Changes in the fair value of UK scheme assets:

	2019 £m	2018 £m
At 31 March 2018/25 March 2017	980.0	974.5
Assumed interest income on scheme assets	25.6	26.7
Scheme administration expenses	(2.7)	(2.3)
Return on scheme assets less interest income	26.5	21.1
Employer contributions and other income	22.5	15.3
Benefits paid (including transfers)	(47.1)	(55.3)
At 30 March 2019/25 March 2018	1,004.8	980.0

Changes in the fair value of UK defined benefit pension obligations:

	2019 £m	2018 £m
At 31 March 2018/25 March 2017	(1,067.6)	(1,211.5)
Interest cost on liabilities	(27.7)	(32.3)
Past service cost	(1.7)	80.5
Effect of changes in financial assumptions	(46.4)	11.9
Effect of changes in demographic assumptions	15.2	24.1
Effect of experience items on liabilities	(0.6)	4.4
Benefits paid (including transfers)	47.1	55.3
At 30 March 2019/25 March 2018	(1,081.6)	(1,067.6)

(b) Defined contribution pension plans

The Group operates a number of defined contribution plans for which the charge in the consolidated income statement for the year was £7.8m (FY18: £8.9m).

25 Employee information

	2019 number	2018 number
Average number of employees		
United Kingdom and Ireland	1,628	2,041
Rest of Europe	504	450
The Americas	63	59
Rest of world	645	638
	2,840	3,188
	2019 £m	2018 £m
Employee costs (including Directors' emoluments)		
Wages and salaries	107.2	128.3
Social security costs	10.4	12.4
Share incentive schemes	0.6	1.0
Sharesave schemes	0.4	1.2
Pension costs	7.8	8.9
	126.4	151.8

More detailed information regarding the Directors' remuneration, shareholdings, pension entitlement, share options and other long term incentive plans is shown in the Directors' remuneration report on pages 74 to 91.

26 Capital commitments

	2019 £m	2018 £m
The following commitments existed at the balance sheet date:		
Contracted but not provided for in the accounts	582.3	630.4

Included in the table above is an amount in relation to the sale of Portals De La Rue Limited to EPIRIS Fund II on 29 March 2018.

As part of the transaction Portals De La Rue Limited will supply security paper to meet the Group's anticipated internal requirements with pre-agreed volumes and price mechanisms for the next 10 years. Based on the terms of the agreement the Group has a capital commitment of approximately £626.9m over the next 10 years. The contract is assessed to be at market rates.

27 Contingent liabilities

De La Rue has extensive international operations and is subject to various legal and regulatory regimes, including those covering taxation matters from which, in the ordinary course of business, contingent liabilities can arise. De La Rue currently has certain ongoing taxation assessments which are provided for where the Company considers it probable that an outflow of economic benefits will occur and the amount can be reliably measured. Specifically there is one tax assessment where no provision has been made on the basis that management does not consider that the chance of an outflow of economic benefits is probable. In the possible event that there was an adverse outcome this could result in a material outflow.

As part of the sale of the CPS business the Company gave certain warranties which were usual for a transaction of this nature. In February 2018 the buyer made a claim under the warranties, which De La Rue has been defending. The parties are in constructive discussions concerning a settlement, which is anticipated to be finalised in the coming months. No amount has been provided for this claim but outstanding amounts from CPS have been written down as detailed in note 3.

During 2017 an employee at the Paper Mill in Bathford suffered a serious injury. The investigation by the enforcing authorities is ongoing. At the date of the statement of financial position no amounts have been provided in respect of this matter. It is not practicable to provide an estimate of the financial effect and there is uncertainty relating to the amount or timing of any outflow.

The Group also provides guarantees and performance bonds which are issued in the ordinary course of business. In the event that a guarantee or performance bond is called, provision may be required subject to the particular circumstances including an assessment of its recoverability.

28 Related party transactions

During the year the Group traded on an arms length basis with the associated company Fidink S.A. (33.3% owned). The Group's trading activities with this company included £17.6m (FY18: £24.6m) for the purchase of security ink and other consumables. At the balance sheet date there were creditor balances of £4.1m (FY18: £0.7m) with Fidink S.A.

Intra-group transactions between the Parent and the fully consolidated subsidiaries or between fully consolidated subsidiaries are eliminated on consolidation.

Key management compensation

	2019 £m	2018 £m
Salaries and other short term employee benefits	2.7	3.0
Retirement benefits:		
- Defined contribution	0.4	0.1
Share based payments	-	0.1
Dividends received	-	_
	3.1	3.2

Key management comprises members of the Board (including the fees of Non-executive Directors) and the ELT. Termination benefits include compensation for loss of office, ex gratia payments, redundancy payments, enhanced retirement benefits and any related benefits in kind connected with a person leaving office or employment.

29 Subsequent events

On 30 May 2019, it was announced that the Chief Executive Officer will be stepping down.

30 Subsidiaries and associated companies as at 30 March 2019

A full list of subsidiary and associated undertakings is below. Unless otherwise stated all Group owned shares are ordinary.

Country of incorpora	ation and operation	Activities	De La Rue interest %
Europe			100
United Kingdom	DLR (No.1) Limited	Holding company	100
	DLR (No.2) Limited*	Holding company	100
	De La Rue Holdings Limited	Holding and general	100
		commercial activities	
	De La Rue International Limited	Trading	100
	De La Rue Overseas Limited	Holding company	100
	De La Rue Finance Limited	Internal financing	100
	De La Rue Investments Limited	Holding company	100
	Portals Group Limited	Holding company	100
	Bradbury Wilkinson Holdings Limited (in liquidation)	(in liquidation)	100
	De La Rue Consulting Services Limited	Trading	100
	De La Rue Healthcare Trustee Limited	Dormant	100
	De La Rue Pension Trustee Limited	Dormant	100
	De La Rue Scandinavia Limited	Holding company	100
	Harrison & Sons Limited ^a	Non-trading	100
	Portals Holdings Limited	Dormant	100
	Portals Property Limited	Trading	100
	De La Rue House, Jays Close, Viables, Basingstoke, Hampshire	ITadilig	100
	RG22 4BS, United Kingdom		
Channel Islands	The Burnhill Insurance Company Limited	Insurance	100
	Level 5, Mill Court, La Charroterie, St Peter Port, GY1 1EJ, Guernsey		
	De La Rue (Guernsey) Limited	Non-trading	100
	PO Box 142, The Beehive, Rohais, St Peter Port, GY1 3HT, Guernsey	0	
Ireland	Thomas De La Rue and Company (Ireland) Limited	Dormant	100
	Suite 3, One Earlsfort Centre, Lower Hatch Street, Dublin 2, Ireland		
Malta	De La Rue Currency and Security Print Limited	Trading	100
Marta	De La Rue Services Limited	Trading	100
	B40/43 Industrial Estate, Bulebel, Zejtun, Malta	Indding	100
The Netherlands	De La Rue BV	Trading	100
	Hoogoorddreef 15, 1101 BA, Amsterdam, Netherlands	Indding	100
Poland	Harrison & Sons Sp. Z o.o	Dormant	100
roialiu	Mokotowska 24, 00-561, Warsaw, Poland	Donnant	100
Sweden	De La Rue (Sverige) AB	Non-trading	100
Sweden	Box 14055, 104 40, Stockholm, Sweden	Non-trading	100
Qualitzardanad		Lielding company	100
Switzerland	Thomas De La Rue A.G. Rue de Morat 11, 1700 Fribourg, Switzerland	Holding company	100
N	Rue de Moral 11, 1700 Flibourg, Switzenand		
North America			100
USA	De La Rue North America Holdings Inc. ^b	Holding company	100
	8333 N.W. 53rd Street, Suite 502, Doral, Florida 33166, USA		
	De La Rue Authentication Solutions Inc.	Trading	100
	1750 North 800 West, Logan, Utah 84321, USA		
Canada	De La Rue Canada One Limited	Trading	100
	1400-340 Albert Street, Ottawa, ON KIR 0AS, Canada		
South America			
Brazil	De La Rue Cash Systems Industrias Limitadaº	Non-trading	100
	De La Rue Cash Systems Limitadaº	Trading	100
	Rua Boa Vista, 254, 13th Floor, Suite 41, Centro,		
	Sao Paulo, 01014-907, Brazil		
Saint Lucia	De La Rue Caribbean Limited	Trading	100
	Meridan Place, Choc Estate, Castries, Saint Lucia		
Africa			
Kenya	De La Rue Currency and Security Print Limited	Trading	100
	De La Rue Kenya EPZ Limited	Trading	100
	De La Rue Kenya Limited	Trading	100
	ABC Towers, 6th Floor, ABC Place, Waiyaki Way, Nairobi, Kenya		
Angola	De La Rue Angola Limitada	Trading	100
	Rua Engrácia Fragoso 60, Edifcio Kalunga Atrium, Escritòrio 104,	~	
	Letra D, Distrito Urbano da Ingombota, Luanda, Angola		
and the second sec	De La Rue Commercial Services Limited	Trading	100
Nigeria	7th Floor, Marble House, 1 Kingsway Road, Ikoyi, Lagos, Nigeria	nauling	100

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30 Subsidiaries and associated companies as at 30 March 2019 continued

Country of incorpo	pration and operation	Activities	De La Rue interest %
Senegal	De La Rue West Africa SARL	Trading	100
	VDN Keur Gorgui Imm Hermes 1, 2e Etage No 16 Dakar-Liberte, BP 10700, Senegal		
South Africa	De La Rue Global Services (SA) (Pty) Limited	Non-trading	100
	3rd Floor, 54 Melrose Boulevard, Melrose Arch, Gauteng, 2196, South Africa		
Australia and O	oceania		
Australia	De La Rue Australia Pty Limited	Trading	100
	Level 22, MLC Centre, 19 Martin Place, Sydney, NSW 2000, Australia		
Far East and As	sia		
China	De La Rue Security Technology (Beijing) Co. Ltd	Trading	100
	1011, 10F Office Building No.1 Guanghua Road Chaoyang District, Beijing, China		
Hong Kong	Thomas De La Rue (Hong Kong) Limited	Trading	100
	Suite 1106-8, 11/F Tai Yau Building, No 181 Johnson Road, Wanchai, Hong Kong		
Sri Lanka	De La Rue Lanka Currency and Security Print (Private) Limited	Trading	60
	No 9/5 Thambiah Avenue, Colombo 7, Sri Lanka		
India	De La Rue India Private Limited	Trading	100
	1404, 14 Floor, Tower B, Signature Towers, South City 1, Gurgaon, Haryana, India		
Singapore	De La Rue Currency and Security Print Pte Ltd 80 Raffles Place, #32-01, UOB Plaza, 048624, Singapore	Non-trading	100
Linited Arab Emir	ates De La Rue FZCO	Trading	100
	Dubai Airport Free Zone Authority, Building 6 West Wing A, Office #820, PO Box 371683, Dubai	Trading	100
Saudi Arabia	De La Rue Communication and Information Technology Limited	Trading	100
	Akaria Plaza, Gate "D", Level 6, Olaya Main St, Riyadh, Kingdom of Saudi Arabia		
Associates			
Switzerland	Fidink S.A.	Trading	33

a Ordinary shares, cumulative preference shares and deferred shares.

b Common stock.

c Quotas.

31 Non-controlling interest

The Group's only subsidiary with a material non-controlling interest is De La Rue Lanka Currency and Security Print (Private) Limited, whose country of incorporation and operation is Sri Lanka. The accumulated non-controlling interest of the subsidiary at the end of the reporting period is shown on the Group balance sheet. The following table summarises key information relating to this subsidiary, before intra-group eliminations:

	2019 £m	2018 £m
Non-current assets	15.2	15.7
Current assets	16.9	
		16.2
Non-current liabilities	(0.4)	(0.4)
Current liabilities	(7.0)	(8.9)
Net assets (100%)	24.6	22.6
Revenue	4.8	37.5
Profit for the year	3.4	3.5
Non-controlling interest percentage	40%	40%
Profit allocated to non-controlling interest	1.4	1.4
Dividends paid to non-controlling interest	0.5	0.3
Cash flows from operating activities	1.1	1.7
Cash flows from investment activities	(0.7)	(1.9)
Cash flows from financing activities	(0.5)	0.3
Net increase in cash and cash equivalents	(0.1)	0.1