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Financial statements

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Directors' statement of responsibilities

The Directors are responsible for preparing the Annual Report, the Remuneration report and the Group and parent company financial statements in accordance with applicable law and regulations.

UK company law requires the Directors to prepare financial statements for each financial year. The Directors are required to prepare the Group financial statements in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union. In preparing the Group financial statements, the Directors have also elected to comply with IFRS as issued by the International Accounting Standards Board (IASB). The Directors have elected to prepare the parent company financial statements in accordance with United Kingdom Accounting Standards and applicable law (United Kingdom Generally Accepted Accounting Practice). Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and its profit or loss for that period.

In preparing the financial statements, the Directors are required

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state that the Group financial statements comply with IFRS as adopted by the European Union and IFRS as issued by the IASB, subject to any material departures disclosed and explained in the Group financial statements;
- state with regard to the parent company financial statements that applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the parent company financial statements; and
- prepare the financial statements on a going concern basis unless it is inappropriate to presume that the Group and the parent company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and to enable them to ensure that the Group financial statements and the Remuneration report comply with the Companies Act 2006 and Article 4 of the IAS Regulation. They are also responsible for safeguarding the assets of the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Group financial statements for the year ended 31 December 2019, comprising principal statements and supporting notes, are set out in the 'Financial statements' on pages 166 to 251 of this report. The parent company financial statements for the year ended 31 December 2019, comprising the balance sheet and the statement of changes in equity for the year ended 31 December 2019 and supporting notes, are set out on pages 252 to 256.

The responsibilities of the auditor in relation to the financial statements are set out in the Independent Auditor's report on pages 154 to 165.

The financial statements for the year ended 31 December 2019 are included in the Annual Report, which is published in printed form and made available on our website. The Directors are responsible for the maintenance and integrity of the Annual Report on our website in accordance with UK legislation governing the preparation and dissemination of financial statements. Access to the website is available from outside the UK, where comparable legislation may be different.

Each of the current Directors, whose names and functions are listed in the Corporate Governance section of the Annual Report 2019 confirms that, to the best of his or her knowledge:

- the Group financial statements, which have been prepared in accordance with IFRS as adopted by the EU and IFRS as issued by the IASB, give a true and fair view of the assets, liabilities, financial position and profit of the Group; and
- the Strategic report and risk sections of the Annual Report, which represent the management report, include a fair review of the development and performance of the business and the position of the company and the Group taken as a whole, together with a description of the principal risks and uncertainties that it faces.

Investor information

Directors' statement of responsibilities continued

Disclosure of information to auditor

The Directors in office at the date of this Annual Report have each confirmed that:

- so far as he or she is aware, there is no relevant audit information of which the company's auditor is unaware; and
- he or she has taken all the steps that he or she ought to have taken as a Director to make himself or herself aware of any relevant audit information and to establish that the company's auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act 2006.

Going concern basis

Pages 50 to 74 contain information on the performance of the Group, its financial position, cash flows, net debt position and borrowing facilities. Further information, including Treasury risk management policies, exposures to market and credit risk and hedging activities, is given in Note 43 to the financial statements, 'Financial instruments and related disclosures'. Having assessed the principal risks and other matters considered in connection with the viability statement, the Directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements.

Internal control

The Board, through the Audit & Risk Committee, has reviewed the assessment of risks and the internal control framework that operates in GSK and has considered the effectiveness of the system of internal control in operation in the Group for the year covered by this Annual Report and up to the date of its approval by the Board of Directors.

The 2018 UK Corporate Governance Code

The Board considers that GlaxoSmithKline plc applies the principles and complies with the provisions of the UK Corporate Governance Code maintained by the Financial Reporting Council, as described in the Corporate Governance section on pages 75 to 114. The Board further considers that the Annual Report, taken as a whole, is fair, balanced and understandable, and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy.

As required by the Financial Conduct Authority's Listing Rules, the auditor has considered the Directors' statement of compliance in relation to those points of the UK Corporate Governance Code which are specified for their review.

Annual Report

The Annual Report for the year ended 31 December 2019, comprising the Report of the Directors, the Remuneration report, the Financial statements and Additional information for investors, has been approved by the Board of Directors and signed on its behalf by

Sir Jonathan Symonds

Chairman

3 March 2020

Independent Auditor's report to the members of GlaxoSmithKline plc

Report on the audit of the financial statements

1. Opinion

In our opinion:

- The financial statements of GlaxoSmithKline plc (the 'Parent company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the Parent company's affairs as at 31 December 2019 and of the Group's profit for the year then ended;
- The Group financial statements have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and IFRSs as issued by the International Accounting Standards Board (IASB);
- The Parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice including FRS 101 'Reduced Disclosure Framework'; and
- The financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements which comprise the:

Group

- Consolidated balance sheet as at 31 December 2019;
- Consolidated income statement for the year then ended;
- Consolidated statement of comprehensive income for the year then ended;
- Consolidated statement of changes in equity for the year then ended:
- Consolidated cash flow statement for the year then ended; and
- Notes 1 to 46 to the financial statements, which includes the accounting principles and policies.

Parent company

- Balance sheet as at 31 December 2019;
- Statement of changes in equity for the year then ended; and
- Notes A to M to the financial statements, which includes the accounting principles and policies.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and IFRSs as adopted by the European Union. The financial reporting framework that has been applied in the preparation of the Parent company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 'Reduced Disclosure Framework' (United Kingdom Generally Accepted Accounting Practice).

2. Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the Group and the Parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We confirm that the non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Parent company, as noted in the Audit & Risk Committee report within the Corporate Governance section of the Annual Report on page 104. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. Audit scope and execution

We structured our approach to the audit to reflect how the Group is organised as well as ensuring our audit was both effective and risk focused. Our audit approach can be summarised into the following areas that enabled us to obtain the evidence required to form an opinion on the Group and Parent company financial statements:

- Risk assessment and audit planning at a Group level. The central control and common systems throughout most of the Group enabled us to structure our audit centrally. In addition to appointing partners for each of the three businesses, we also had partners coordinate the component and legal entity audits in each country. These global business partners met regularly with the relevant management to understand strategy and matters which arose throughout the year that could have impacted on the financial reporting. The regular meetings we had with members of the Internal Audit, the internal Legal Counsel and the Global Ethics & Compliance teams allowed us to understand their work, to review their reports and to enhance our risk assessment:
- Significant changes in audit scope. The Group completed two major transactions during the year:
 - The acquisition of 100% shares of Tesaro Inc. (Tesaro), a commercial-stage oncology business; and
 - The acquisition of the Pfizer Consumer Healthcare business to form a new consumer healthcare joint venture with Pfizer Inc.

As a result of the Pfizer transaction, some of the Pfizer Consumer Healthcare operations in the United States (US) and China have been brought into audit scope. Both transactions required an increased extent of audit effort in all areas, including the need to perform additional opening balance sheet testing and consolidation work;

Investor information

Independent Auditor's report continued

Report on the audit of the financial statements continued

- Audit work performed at global shared service centres. A significant amount of the Group's operational processes that cover financial reporting are undertaken in shared service centres. Our central team, which included senior individuals responsible for each of the global processes, coordinated our audit work at the shared service centres in scope for the Group audit, to ensure we developed a good understanding of the end-to-end view of the key processes that supported material account balances, classes of transactions and disclosures within the Group financial statements. We then evaluated the effectiveness of internal controls over financial reporting for these processes and considered the implications for the remainder of our audit work;
- Audit work executed at component level and individual legal entities. The following components were subject to market-specific audit procedures as well as the assessment of the internal controls over financial reporting: Belgium; Canada; China; France; Germany; Italy; Japan; Spain; Switzerland; United Kingdom and United States. The Group audit team was in active dialogue throughout the audit with the component audit teams responsible for the audit work under the direction and supervision of the Group audit team. This included determining whether the work was planned and performed in accordance with the overall Group audit strategy and the requirements of our Group audit instructions to the components. As part of supervising the work of the components, senior Group audit team members visited all the component countries, as well as locations of all shared service centre audits;
- Audit procedures undertaken at a Group level and on the Parent company. In addition to the above, we also performed audit work on the Group and Parent company financial statements, including but not limited to the consolidation of the Group's results, the preparation of the financial statements, certain disclosures within the directors' remuneration report, litigation provisions and exposures in addition to management's entity level and oversight controls relevant to financial reporting. We also carried out analytical procedures to confirm our conclusion that there were no significant risks of material misstatement of the aggregated financial information of the remaining components not subject to the market-specific audit procedures; and
- Internal controls testing approach. We tested internal controls over financial reporting across all in-scope entities and entity level controls at the Group level. We were able to place reliance on controls where planned and it was more efficient. Notwithstanding the IT controls deficiencies disclosed in the key audit matters section of this report, mitigating controls existed which allowed us to continue to take reliance on controls where planned.

The coverage obtained for our Group scoping strategy is summarised as follows:

		Profit	Total
Benchmark	Revenue	before tax	assets
Covered by market-specific procedures	69%	70%	86%
Covered by review at Group level	31%	30%	14%

The residual consists of components or legal entities each with annual revenue (turnover) less than 1.8% of the total Group revenue. These entities and components are non-significant components that individually and in aggregate do not present a reasonable possibility of risk of material misstatement.

4. Our application of materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Group financial statements		Parent company financial statements
Materiality	£275 million (2018 – £270 million)		£68 million (2018 − £67 million)
Basis for determining materiality	etermining for materiality we considered		Materiality was determined using the total assets benchmark.
	Using professional judgement we have determined preliminary materiality to be £275 million.		
	Metric	%	
	Statutory profit before tax	4.4%	
	Adjusted profit before tax*	3.3%	
	Revenue	0.8%	
	Net cash inflow from operating activities	3.5%	
	* A reconciliation between the St profit before tax and Adjusted p before tax is detailed in the Adju Items section of the strategic re		
Rationale for the metrics used by investors and other readers of the financial statements, we concluded statutory profit before tax to be the primary benchmark with adjusted profit before tax, revenue and net cash inflow from operating activities the supporting benchmarks.		The Parent company holds the Group's investments and is not in itself profit-oriented. The strength of the balance sheet is the key measure of financial health that is important to shareholders since	
	The component materiality allocated to the in-scope components ranged between £82.5 million and £192.5 million.		the primary concern for the Parent company is the payment of dividends. Using a benchmark of total
	The range of materiality allocated across components in the audit of the prior year's Group financial statements was between £81 million and £189 million.		assets is therefore the appropriate metric.

Independent Auditor's report continued

Report on the audit of the financial statements continued

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole. Group performance materiality was set at 70% of Group materiality for the 2019 audit (2018 – 70%). In determining performance materiality, we considered factors including:

- Our risk assessment, including our assessment of the Group's overall control environment and that we consider it appropriate to rely on controls over a number of business processes; and
- Our past experience of the audit, which has indicated a low number of corrected and uncorrected misstatements identified in prior periods.

We agreed with the Audit & Risk Committee that we would report to the Committee all audit differences in excess of £10 million (2018 – £10 million) as well as any differences below this threshold, which in our view, warranted reporting on qualitative grounds. We also report to the Audit & Risk Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

5. Conclusions relating to going concern, principal risks and viability statement

Going concern

We have reviewed the directors' statement in notes 1 and A to the financial statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them and their identification of any material uncertainties to the Group's and Parent company's ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements.

We considered as part of our risk assessment the nature of the Group, its business model and related risks including where relevant the impact of Brexit, the requirements of the applicable financial reporting framework and the system of internal control. We evaluated the directors' assessment of the Group's ability to continue as a going concern, including challenging the underlying data and key assumptions used to make the assessment, and evaluated the directors' plans for future actions in relation to their going concern assessment.

We are required to state whether we have anything material to add or draw attention to in relation to that statement required by Listing Rule 9.8.6R(3) and report if the statement is materially inconsistent with our knowledge obtained in the audit.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

Principal risks and viability statement

Based solely on reading the directors' statements and considering whether they were consistent with the knowledge we obtained in the course of the audit, including the knowledge obtained in the evaluation of the directors' assessment of the Group's and the Parent company's ability to continue as a going concern, we are required to state whether we have anything material to add or draw attention to in relation to the:

- Disclosures on pages 43 to 45 that describe the principal risks, procedures to identify emerging risks and an explanation of how these are being managed or mitigated;
- Directors' confirmation on page 105 that they have carried out a robust assessment of the principal and emerging risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity; or
- Directors' explanation on page 47 as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We are also required to report whether the directors' statement relating to the prospects of the Group required by Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

Investor information

Independent Auditor's report continued

6. Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter description

Valuation of the ViiV Healthcare Shionogi contingent consideration liability

In recent years the Group has completed a number of significant transactions which resulted in the recognition of material contingent consideration liabilities, which are a key source of estimation uncertainty. The most significant of these liabilities was the ViiV Healthcare Shionogi Contingent Consideration Liability (ViiV CCL).

The Group completed the acquisition of the remaining 50% interest in the Shionogi-ViiV Healthcare joint venture in 2012. Upon completion, the Group recognised a contingent consideration liability for the fair value of the expected future payments to be made to Shionogi. As at 31 December 2019, the liability was valued at £5,103 million.

We identified the ViiV CCL as a key audit matter because of the significant estimates and assumptions management makes related to the sales forecasts of dolutegravir-based regimens used to value the ViiV CCL. Such forecasts are based on management's assessment of the expected launch dates, the ability to shift market practice and prescriber behaviour towards 2-drug regimens, and subsequent sales volumes and pricing. The forecasts also required significant audit effort to perform appropriate audit procedures to challenge and evaluate the reasonableness of those forecasts.

The contingent consideration liabilities, including the ViiV CCL, are disclosed as a key source of estimation uncertainty in note 3 of the Group financial statements with further disclosures provided in notes 28, 32, and 43. The matter is also discussed in the Audit & Risk Committee report within the Corporate Governance section of the Annual Report.

How the scope of our audit responded to the key audit matter

Audit procedures performed

We performed the following audit procedures, amongst others, related to the sales forecasts:

- Challenged management's evidence through enquiries of key individuals from the senior leadership team, commercial strategy team and key personnel involved in the budgeting and forecasting process, and the obtaining of objective evidence with respect to key inputs and assumptions;
- Challenged the US volume assumptions made by management to estimate sales forecasts. This involves benchmarking market share data against external data, such as total prescription volumes and new patient prescription volumes, in order to assess for any sources of contradictory evidence;
- Challenged the reasonableness of US pricing assumptions made by management, by comparing the forecasted Returns and Rebates accruals rate by product against the current rate, and assessing the forecasted Returns and Rebates against comparable products and expected changes in payer policy;
- Reviewed the results of clinical studies undertaken in the year by management and key competitors in order to assess whether these are corroborative or contradictory to management's assumptions on dolutegravir sales forecasts in the US;
- Benchmarked management's forecasts against analysts reports and developed a range of possible outcomes using analyst forecast growth for ViiV Healthcare with a consensus of 15 analysts, including Bank of America Merrill Lynch, Morgan Stanley, Barclays, Credit Suisse, Jefferies and Redburn; and
- Tested the controls over the key inputs and assumptions used in the valuation of the contingent consideration liability, including management review controls over the sales forecasts of dolutegravir-based regimens.

Key observations communicated to the Audit & Risk Committee

Underlying sales forecasts for dolutegravir-based regimens used in the valuation of the ViiV CCL have been updated to reflect changes in the HIV market and ViiV's products in that market.

The approach to valuing the ViiV CCL was consistent with prior periods and management's forecasts are within our benchmarked observable range. We are satisfied that the valuation of the ViiV CCL is reasonable and consistent with IFRS.

Independent Auditor's report continued

Report on the audit of the financial statements continued

Key audit matter description

Valuation of US Returns and Rebates (RAR) accruals

In the US the Group sells to customers under various commercial and government mandated contracts and reimbursement arrangements that include rebates, chargebacks and a right of return for certain pharmaceutical products. As such, revenue recognition reflects gross-to-net sales adjustments. These adjustments are known as the Returns and Rebates (RAR) accruals and are a source of significant estimation uncertainty which could have a material impact on reported revenue. The three most significant payer channels (also referred to as buying groups) within the RAR accrual are managed healthcare organisations, Medicaid and Medicare Part D.

The two main causes of significant estimation uncertainty are:

- The utilisation rate, which is the portion of total sales that will be made into each payer channel, estimated by management in recording the accruals. The utilisation assumption is the most challenging of the key assumptions used to derive the accrual given that it is influenced by market demand and other factors outside the control of the Group; and
- The time lag between the point of sale and the point at which exact rebate amounts are known to the Group upon receipt of a claim. Those payer channels with the longest time lag result in a greater accrued period, and therefore, a greater level of estimation uncertainty in estimating the period end accrual.

The level of estimation uncertainty is also impacted by significant shifts in channel mix often driven by changes in the competitive landscape, including competitor and generic product launches.

In the US Pharmaceuticals business in 2019 £11,069 million of RAR deductions were made to gross revenue of £18,471 million resulting in net revenue of £7,402 million. The balance sheet accrual at 31 December 2019 for the combined US Pharmaceuticals and Vaccines businesses amounted to £4.200 million.

US Pharmaceuticals returns and rebates are disclosed as a key accounting estimate in note 3 of the Group financial statements with further disclosures provided in note 28. The matter is also discussed in the Audit & Risk Committee report within the Corporate Governance section of the Annual Report.

How the scope of our audit responded to the key audit matter

Audit procedures performed

We performed the following audit procedures, amongst others, related to management estimates in the RAR accruals:

- Assessed the historical accuracy of management's estimates against actual outcomes to inform our assessment of the current year accrual;
- Performed substantive analytical procedures by developing an independent expectation of the accrual balance for each of the key segments, based on historical claims received adjusted to reflect market changes in the period including an assessment of the time lag between the initial point of sale and the claim receipt. We then compared this independent expectation to those of management to evaluate the appropriateness of management's ending accrual position;
- Recalculated the accrual recognised to determine that it is consistent with the assumptions determined through management's process;
- Selected a sample of individual utilisation rates giving particular focus to products which have experienced increased generic competition in the current year. We challenged and obtained support for the utilisation rates selected, which included comparison to historical utilisation rates;
- Challenged the appropriateness of period-end adjustments to the liability made as part of the ongoing review of the estimated accrual. The impact of these market events on the year end accrual was considered and reflected as part of our overall audit approach; and
- Tested the key controls over the estimation of RAR accruals including the controls associated with the bi-annual forecasting of utilisation rates process and the month-end accrual review controls.

Key observations communicated to the Audit & Risk Committee

We are satisfied that management's estimated liability of the RAR accruals at the year end is appropriate and reasonable when assessed against our own independent expectations and our assessment of the accuracy of historical estimates against actual rebates.

Investor information

Independent Auditor's report continued

Report on the audit of the financial statements continued

Key audit matter description

Valuation of intangible assets recognised on Tesaro and Pfizer transactions

During the year, the Group recognised £15,449 million of other intangible assets (including licences, patents, trademarks and brand names, but excluding goodwill) on the acquisitions of Tesaro Inc. and the Pfizer Consumer Healthcare business.

The determination of the fair value of the acquired intangible assets relies on certain management assumptions and estimates of future trading performance, including the probability of success of pipeline products and product innovations, likelihood of regulatory approval, future sales growth rates and profit margin levels, and discount rates.

We identified the valuation of other intangible assets recognised on these acquisitions as a key audit matter because of the inherent judgements involved in estimating future cash flows and auditing such estimates required extensive audit effort to challenge and evaluate the reasonableness of those forecasts. We also engaged our fair value specialists to assess the discount rates and valuation methodologies applied.

The disclosures relating to other intangible assets are included in note 20 and 40 of the Group financial statements. The matter is also discussed in the Audit & Risk Committee report within the Corporate Governance section of the Annual Report.

How the scope of our audit responded to the key audit matter

Audit procedures performed

We performed the following audit procedures, amongst others, related to the probability of success of pipeline products and product innovations, likelihood of regulatory approval, future sales growth rates and profit margin levels, and discount rates used in the valuation of the acquired intangible assets:

- Met with the key individuals from the senior leadership team, product category leads and key personnel involved in the forecasting process to discuss and evaluate management's evidence to support future sales growth rates and profitability assumptions;
- Challenged the business assumptions applied by management in estimating sales forecasts, including benchmarking of sales forecasts and product compound annual growth rates to external data for the specific market segment. This included independent market research of expected category growth and assessment of any sources of contradictory evidence;
- Evaluated the probability of success factors related to regulatory approval applied to pipeline products to calculate forecast sales to be derived from future commercialised assets;
- Assessed the historical accuracy of management's forecasts including consumption data and estimates of new sales from innovation;
- Compared the forecast sales to the Plan data (asset by asset internal forecasts) approved by senior management and the Board of directors;
- With the assistance of our fair value specialists, assessed the reasonableness of valuation-specific assumptions used by management, including discount rate and terminal growth rate, and whether these assumptions were consistent with how a well-informed independent third party would value these assets;
- Tested management review controls over the key inputs and assumptions used in valuation of intangible assets. The controls encompass review of the valuation models, which contain a number of assumptions such as the revenue growth rates, probability of success of pipeline products, profit margins and discount rates.

Key observations communicated to the Audit & Risk Committee

Whilst noting that there are potential risks to forecasts from uncertainties such as regulatory approval of pipeline products and sales growth from product innovations, we concluded that the judgements made by management were reasonable and in accordance with IFRS.

Independent Auditor's report continued

Report on the audit of the financial statements continued

Key audit matter description

Valuation of uncertain tax positions, including transfer pricing

The Group operates in numerous jurisdictions and there are open tax and transfer pricing matters and exposures with UK, US and overseas tax authorities that give rise to uncertain tax positions. There is a range of possible outcomes for provisions and contingencies can be wide and management are required to make certain judgements in respect of estimates of tax exposures and contingencies in order to assess the adequacy of tax provisions, which are sometimes complex as a result of the considerations required over multiple tax laws and regulations.

At 31 December 2019, the Group has recorded provisions of £933 million in respect of uncertain tax positions.

Valuation of uncertain tax positions is disclosed as a key source of estimation uncertainty in note 3 of the Group financial statements with further disclosures included in note 14. The matter is also discussed in the Audit & Risk Committee report within the Corporate Governance section of the Annual Report.

How the scope of our audit responded to the key audit matter

Audit procedures performed

With the support of tax specialists, we assessed the appropriateness of the uncertain tax provisions by performing the following audit procedures amongst others:

- Assessed and challenged provisions for uncertain tax positions, and focused our work on those jurisdictions where the Group has the greatest potential exposure and where the highest level of judgement is required;
- Assessed management's policies for recognition and measurement of uncertain tax positions for compliance with the guidance per IFRIC 23;
- Involved our transfer pricing specialists to review the transfer pricing methodology of the Group and associated approach to provisioning;
- Involved our UK, US and international tax and transfer pricing specialists to challenge the conclusions reached by management, both in relation to the expected outcome and the financial impact;
- Considered evidence such as the actual results from the recent tax authority audits and enquiries, third-party tax advice where obtained and our tax specialists' own knowledge of market practice in relevant jurisdictions; and
- Tested key controls over preparation, review and reporting of judgmental tax balances and transactions, which include provisions for uncertain tax provisions.

Key observations communicated to the Audit & Risk Committee

We are satisfied that management's judgements in relation to uncertain tax positions and the related disclosures are in accordance with IFRS. From our work we concluded that management have applied a consistent approach to estimating uncertain tax provisions, the judgements continue to be prudent and are appropriately recorded.

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Independent Auditor's report continued

Report on the audit of the financial statements continued

Key audit matter description

IT systems which impact financial reporting

The IT systems within the Group form a critical component of the Group's financial reporting activities and impact all account balances. IT controls, in the context of our scope for the financial audit, primarily relate to user access security and change control.

During the year, the Group continued to implement the remediation plan to address the user access and change control IT deficiencies identified in the prior year. This primarily involved the removal of inappropriate access together with the implementation of appropriate privileged access management processes and controls which are planned to be fully complete

We have identified the IT systems, which impact financial reporting as a key audit matter because of the:

- Reliance on these systems within the Group;
- Importance of the IT controls over the systems to maintaining an effective control environment. A key interdependency exists between the ability to rely on IT controls and the ability to rely on system configured automated controls and system reports;
- Pervasive nature of these systems;
- Fact that some remediation activities are not yet complete and will continue into 2020;
- Considerable involvement of IT specialists; and
- Additional effort needed from the audit team to test compensating controls to mitigate the unaddressed IT risks.

IT systems which impact financial reporting are discussed in the Audit & Risk Committee report within the Corporate Governance section of the Annual Report. The key IT systems impact a range of business processes, including General Ledger, Procurement, Sales and Financial Consolidation.

How the scope of our audit responded to the key audit matter

Audit procedures performed over IT systems As a result of the IT control deficiencies identified, we incorporated additional considerations in performing our risk assessment and audit procedures as follows:

- Considered the impact on our risk assessment through evaluating our audit risks in the context of the IT deficiencies with assistance of our IT specialist team; and
- Tested additional manual business process controls, which addressed the related IT risks.

Key observations communicated to the Audit & Risk Committee

Management's actions have made significant progress in reducing the number of deficiencies in the year relating to user access and change management. The Group has many layers of business process controls to mitigate the risk associated with the IT control deficiencies.

We are satisfied that mitigating business process controls address the risk of material misstatement impacting financial reporting caused by IT control deficiencies.

Independent Auditor's report continued

Report on the audit of the financial statements continued

7. Other information

The directors are responsible for the other information. The other information comprises the information included in the Annual Report, other than the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in respect of these matters.

We summarise below our work in relation to areas of the other information including those areas upon which we are specifically required to report:

Matters we are specifically required to report

Our responsibility	Our reporting
Fair, balanced and understandable Consider whether the statement given by the directors that they consider the Annual Report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy is materially inconsistent with our knowledge obtained from the audit.	We consider that the directors' statement is consistent with our knowledge obtained from the audit.
Audit & Risk Committee report Consider whether it deals appropriately with those matters that we reported to the Audit & Risk Committee.	All matters we reported have been appropriately covered in the Audit & Risk Committee report.
Directors' statement of compliance with the UK Corporate Governance Code ('the Code') Consider whether the parts of the directors' statement required under the Listing Rules relating to the Parent company's compliance with the Code containing provisions specified for review by the auditor in accordance with Listing Rule 9.8.10R(2) properly discloses any departure from a relevant provision of the Code.	We did not identify any such matters.
Principal risks and viability statement Review the confirmation and description in the light of the knowledge gathered during the audit, such as through considering the directors' processes to support the statements made, challenging management's key judgements and estimates, consideration of historical forecasting accuracy and evaluating macro-economic assumptions. Consider if the statements are aligned with the relevant provisions of the Code.	As set out in the section 'Conclusions relating to going concern, principal risks and viability statement', we have nothing material to report, add or draw attention to in respect of these matters.
Directors' Remuneration report Report whether the part of the directors' remuneration report to be audited is properly prepared and the disclosures specified by the Companies Act have been made.	As set out in the section 'Opinions on other matters prescribed by the Companies Act 2006', in our opinion, the part of the directors' remuneration report to be audited has been prepared in accordance with the Companies Act 2006.

As set out in the section 'Opinions on other matters

the information in these reports is consistent with the

accordance with applicable legal requirements.

audited financial statements and has been prepared in

prescribed by the Companies Act 2006', in our opinion, based on the work undertaken in the course of the audit,

Strategic report and directors' report

Report whether they are consistent with the audited financial statements

light of the knowledge and understanding of the Group and of the Parent

Report if we have identified any material misstatements in either report in the

and are prepared in accordance with applicable legal requirements.

company and their environment obtained in the course of the audit.

Governance and remuneration

Financial statements

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Independent Auditor's report continued

Report on the audit of the financial statements continued

Other reporting on other information

Our responsibility Our reporting

Alternative performance measures (APMs)

APMs are measures that are not defined by generally accepted accounting practice (GAAP) and therefore are not typically included in the financial statement part of the Annual Report. The Group use APMs, such as adjusted profit, free cash flow and constant currency growth rates in some of its quarterly and annual reporting of financial performance.

We have reviewed and assessed management's calculation and reporting of these metrics to assess consistency with the Group's published definitions and policies for these items.

We have also considered and assessed whether the use of APMs in the Group's reporting results is consistent with the guidelines produced by regulators such as the European Securities and Markets Authority (ESMA) guidelines on the use of APMs and the FRC Alternative Performance Measures Thematic Review published in November 2017.

We also considered whether there was an appropriate balance between the use of statutory metrics and APMs, in addition to whether clear definitions and reconciliation for APMs used in financial reporting have been provided.

In our opinion:

- the use, calculation and disclosure of APMs is consistent with the Group's published definitions and
- the use of APMs in the Group's reporting results is consistent with the guidelines produced by ESMA and FRC; and
- there is an appropriate balance between the use of statutory metrics and APMs, together with clear definitions and reconciliation for APMs used in financial reporting.

Dividends and distribution policy

Consider whether the dividends policy is transparent and the dividends paid are consistent with the policy as outlined in the strategic report on page 61.

In our opinion, the dividends policy is appropriately disclosed and dividends paid are consistent with the policy.

Independent Auditor's report continued

Report on the audit of the financial statements continued

8. Responsibilities of directors

As explained more fully in the directors' responsibilities statement, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the Parent company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the Parent company or to cease operations, or have no realistic alternative but to do so.

9. Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Details of the extent to which the audit was considered capable of detecting irregularities, including fraud are set out below.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

10. Extent to which the audit was considered capable of detecting irregularities, including fraud

We identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and then design and perform audit procedures responsive to those risks, including obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion.

Identifying and assessing potential risks related to irregularities

In identifying and assessing the risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, we considered the following:

 The nature of the industry and sector, control environment and business performance including the design of the Group's remuneration policies, key drivers for directors' remuneration, bonus levels and performance targets;

- Enquiring of management, internal audit and the Audit & Risk Committee, including obtaining and reviewing supporting documentation, concerning the Group's policies and procedures relating to:
 - Identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
 - Detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud; and
 - The internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations.
- Discussing among the engagement team including significant component audit teams and involving relevant internal specialists, including tax, valuations, pensions, IT and industry specialists regarding how and where fraud might occur in the financial statements and any potential indicators of fraud; and
- Obtaining an understanding of the legal and regulatory frameworks that the Group operates in, focusing on those laws and regulations that had a direct effect on the financial statements, such as provisions of the UK Companies Act, pensions legislation and tax legislations or that had a fundamental effect on the operations of the Group, including the Good Clinical Practice, the FDA regulations, General Data Protection requirements, Anti-bribery and corruption policy and the Foreign Corrupt Practices Act.

Audit response to risks identified

Our procedures to respond to risks identified included the following:

- Reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- Enquiring of management, the Audit & Risk Committee and in-house and external legal counsel concerning actual and potential litigation and claims;
- Performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud; and
- Reading minutes of meetings of those charged with governance, reviewing internal audit reports and correspondence with regulators.

We have also considered the risks noted above in addressing the risk of fraud through management override of controls:

- Testing the appropriateness of journal entries and other adjustments;
- Assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and
- Evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

Investor information

Independent Auditor's report continued

Report on the audit of the financial statements continued

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members and significant component audit teams, and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Report on other legal and regulatory requirements

11. Opinions on other matters prescribed by the Companies Act 2006

In our opinion, the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- The information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- The strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and of the Parent company and their environment obtained in the course of the audit, we have not identified any material misstatements in the strategic report or the directors' report.

12. Matters on which we are required to report by exception

Adequacy of explanations received and accounting records Under the Companies Act 2006 we are required to report to you if, in our opinion:

- We have not received all the information and explanations we require for our audit; or
- Adequate accounting records have not been kept by the Parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- The Parent company financial statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of directors' remuneration have not been made or the part of the directors' remuneration report to be audited is not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

13. Other matters

Auditor tenure

Following the recommendation of the Audit & Risk Committee, with effect from 1 January 2018 we were appointed by the Board of Directors to audit the financial statements for the year ended 31 December 2018 and subsequent financial periods. The period of total uninterrupted engagement of the firm is two years.

Consistency of the audit report with the additional report to the Audit & Risk Committee

Our audit opinion is consistent with the additional report to the Audit & Risk Committee we are required to provide in accordance with ISAs (UK).

14. Use of our report

This report is made solely to the Parent company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Parent company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Parent company and the Parent company's members as a body, for our audit work, for this report, or for the opinions we have formed.

The Parent company has passed a resolution in accordance with section 506 of the Companies Act 2006 that the senior statutory auditor's name should not be stated.

Deloitte LLP

Statutory Auditor London, United Kingdom 3 March 2020

Consolidated income statement

for the year ended 31 December 2019

	Notes	2019	2018 £m	2017
		£m		£m
Turnover	6	33,754	30,821	30,186
Cost of sales		(11,863)	(10,241)	(10,342)
Gross profit		21,891	20,580	19,844
Selling, general and administration		(11,402)	(9,915)	(9,672)
Research and development		(4,568)	(3,893)	(4,476)
Royalty income		351	299	356
Other operating income/(expense)	7	689	(1,588)	(1,965)
Operating profit	8	6,961	5,483	4,087
Finance income	11	98	81	65
Finance expense	12	(912)	(798)	(734)
Profit on disposal of interest in associates		_	3	94
Share of after tax profits of associates and joint ventures	13	74	31	13
Profit before taxation		6,221	4,800	3,525
Taxation	14	(953)	(754)	(1,356)
Profit after taxation for the year		5,268	4,046	2,169
Profit attributable to non-controlling interests		623	423	637
Profit attributable to shareholders		4,645	3,623	1,532
		5,268	4,046	2,169
Basic earnings per share (pence)	15	93.9p	73.7p	31.4p
Diluted earnings per share (pence)	15	92.6p	72.9p	31.0p

Consolidated statement of comprehensive income

for the year ended 31 December 2019

		2019 £m	2018 £m	2017 £m
Profit for the year		5,268	4,046	2,169
Other comprehensive (expense)/income for the year				
Items that may be subsequently reclassified to income statement:				
Exchange movements on overseas net assets and net investment hedges	37	(832)	(480)	462
Reclassification of exchange movements on liquidation or disposal of overseas subsidiaries	37	(75)	_	109
Fair value movements on equity investments				(14)
Deferred tax on fair value movements on equity investments				47
Reclassification of fair value movements on equity investments		_	_	(42)
Deferred tax reversed on reclassification of equity investments		_	_	(18)
Fair value movements on cash flow hedges		(20)	140	(10)
Deferred tax on fair value movements on cash flow hedges		16	(22)	-
Reclassification of cash flow hedges to income statement		3	(175)	-
Deferred tax reversed on reclassification of cash flow hedges		_	20	-
		(908)	(517)	534
Items that will not be reclassified to income statement:				
Exchange movements on overseas net assets of non-controlling interests	37	(75)	(1)	(149)
Fair value movements on equity investments		372	180	
Deferred tax on fair value movements on equity investments		(95)	10	
Remeasurement (losses)/gains on defined benefit plans		(1,050)	728	549
Tax on remeasurement of defined benefit plans		189	(146)	(221)
		(659)	771	179
Other comprehensive (expense)/income for the year	37	(1,567)	254	713
Total comprehensive income for the year		3,701	4,300	2,882
Total comprehensive income for the year attributable to:				
Shareholders		3,153	3,878	2,394
Non-controlling interests		548	422	488
Total comprehensive income for the year		3,701	4,300	2,882

Investor information

Consolidated balance sheet

as at 31 December 2019

	Notes	2019 £m	2018 £m
Non-current assets			
Property, plant and equipment	17	10,348	11,058
Right of use assets	18	966	
Goodwill	19	10,562	5,789
Other intangible assets	20	30,955	17,202
Investments in associates and joint ventures	21	314	236
Other investments	22	1,837	1,322
Deferred tax assets	14	4,096	3,887
Derivative financial instruments	43	103	69
Other non-current assets	23	1,020	1,576
Total non-current assets		60,201	41,139
Current assets			
Inventories	24	5,947	5,476
Current tax recoverable	14	262	229
Trade and other receivables	25	7,202	6,423
Derivative financial instruments	43	421	188
Liquid investments	29	79	84
Cash and cash equivalents	26	4,707	3,874
Assets held for sale	27	873	653
Total current assets		19,491	16,927
Total assets		79,692	58,066
Current liabilities			
Short-term borrowings	29	(6,918)	(5,793)
Contingent consideration liabilities	32	(755)	(837)
Trade and other payables	28	(14,939)	(14,037)
Derivative financial instruments	43	(188)	(127)
Current tax payable	14	(629)	(965)
Short-term provisions	31	(621)	(732)
Total current liabilities		(24,050)	(22,491)
Non-current liabilities			
Long-term borrowings	29	(23,590)	(20,271)
Corporation tax payable	14	(189)	(272)
Deferred tax liabilities	14	(3,810)	(1,156)
Pensions and other post-employment benefits	30	(3,457)	(3,125)
Other provisions	31	(670)	(691)
Derivative financial instruments	43	(1)	(1)
Contingent consideration liabilities	32	(4,724)	(5,449)
Other non-current liabilities	33	(844)	(938)
Total non-current liabilities		(37,285)	(31,903)
Total liabilities		(61,335)	(54,394)
Net assets		18,357	3,672
Equity			
Share capital	36	1,346	1,345
Share premium account	36	3,174	3,091
Retained earnings (2018 revised – see Note 1)	37	4,530	(2,716)
Other reserves	37	2,355	2,061
Shareholders' equity		11,405	3,781
Non-controlling interests (2018 revised – see Note 1)		6,952	(109)
Total equity		18,357	3,672

The financial statements on pages 166 to 251 were approved by the Board on 3 March 2020 and signed on its behalf by

Sir Jonathan Symonds

Chairman

Consolidated statement of changes in equity for the year ended 31 December 2019

				Shareh	olders' equity		
	Share	Share	Retained	Other		Non-controlling	Total
	capital £m	premium £m	earnings £m	reserves £m	Total £m	interests £m	equity £m
At 1 January 2017	1,342	2,954	(5,392)	2,220	1,124	3,839	4,963
Profit for the year	_	_	1,532	_	1,532	637	2,169
Other comprehensive income for the year	_	_	899	(37)	862	(149)	713
Total comprehensive income for the year	_	_	2,431	(37)	2,394	488	2,882
Distributions to non-controlling interests						(789)	(789)
Contribution from non-controlling interests	_	_	_	_	_	21	21
Dividends to shareholders	_	_	(3,906)	_	(3,906)	_	(3,906)
Changes in non-controlling interests	_	_	_	_	_	(2)	(2)
Shares issued	1	55	_	_	56	_	56
Shares acquired by ESOP Trusts	_	10	581	(656)	(65)	_	(65)
Write-down of shares held by ESOP Trusts	_	_	(520)	520	_	_	_
Share-based incentive plans	_	_	333	_	333	_	333
Tax on share-based incentive plans	_	_	(4)	_	(4)	_	(4)
At 31 December 2017	1,343	3,019	(6,477)	2,047	(68)	3,557	3,489
Implementation of IFRS 15	_	_	(4)	_	(4)	_	(4)
Implementation of IFRS 9	_	_	277	(288)	(11)	_	(11)
At 31 December 2017, as adjusted	1,343	3,019	(6,204)	1,759	(83)	3,557	3,474
Profit for the year	_	-	3,623	_	3,623	423	4,046
Other comprehensive income for the year	_	_	124	131	255	(1)	254
Total comprehensive income for the year	_	_	3,747	131	3,878	422	4,300
Distributions to non-controlling interests	_	_	_	_	_	(570)	(570)
Contribution from non-controlling interests	-	-	_	_	-	21	21
Derecognition of non-controlling interests in Consumer Healthcare Joint Venture	_	_	4,056	_	4,056	(4,118)	(62)
Dividends to shareholders	_	_	(3,927)	_	(3,927)	(4,110)	(3,927)
Realised profits on disposal of equity investments	_	_	56	(56)	(0,027)	_	(0,021)
Share of associates and joint ventures realised profits				(00)			
on disposal of equity investments	_	-	38	(38)	_	-	_
Shares issued	2	72	_	-	74	-	74
Write-down of shares held by ESOP Trusts	-	-	(265)	265	_	-	-
Share-based incentive plans	-	-	360	-	360	-	360
Tax on share-based incentive plans	-	-	2	_	2	-	2
At 31 December 2018, as reported	1,345	3,091	(2,137)	2,061	4,360	(688)	3,672
Adjustment to non-controlling interest							
(see Note 1)	_		(579)		(579)	579	-
At 31 December 2018, as revised	1,345	3,091	(2,716)	2,061	3,781	(109)	3,672
Implementation of IFRS 16			(93)		(93)	- ()	(93)
At 31 December 2018, as adjusted	1,345	3,091	(2,809)	2,061	3,688	(109)	3,579
Profit for the year	_	_	4,645	_	4,645	623	5,268
Other comprehensive income for the year			(1,766)	274	(1,492)	(75)	(1,567)
Total comprehensive income for the year			2,879	274	3,153	548	3,701
Distributions to non-controlling interests	_	-	_	-	_	(364)	(364)
Changes in non-controlling interests	_	_	(0.050)	_	(0.050)	(10)	(10)
Dividends to shareholders	_	_	(3,953)	_	(3,953)	-	(3,953)
Recognition of interest in Consumer Healthcare Joint Venture	-	_	8,082	-	8,082	6,887	14,969
Realised losses on disposal of equity investments	-	-	(4)	4	-	-	-
Shares issued	1	50	-	-	51	-	51
Shares acquired by ESOP Trusts	-	33	295	(328)	-	-	-
Write-down of shares held by ESOP Trusts	-	-	(344)	344	-	-	_
Share-based incentive plans	-	-	365	-	365	-	365
Tax on share-based incentive plans		_	19	_	19	-	19
At 31 December 2019	1,346	3,174	4,530	2,355	11,405	6,952	18,357

Consolidated cash flow statement

for the year ended 31 December 2019

	Notes	2019 £m	2018 £m	2017 £m
Cash flow from operating activities				
Profit after taxation for the year		5,268	4,046	2,169
Adjustments reconciling profit after tax to operating cash flows	41	4,264	5,701	6,089
Cash generated from operations		9,532	9,747	8,258
Taxation paid		(1,512)	(1,326)	(1,340)
Net cash inflow from operating activities		8,020	8,421	6,918
Cash flow from investing activities				
Purchase of property, plant and equipment		(1,265)	(1,344)	(1,545)
Proceeds from sale of property, plant and equipment		95	168	281
Purchase of intangible assets		(898)	(452)	(657)
Proceeds from sale of intangible assets		404	256	48
Purchase of equity investments		(258)	(309)	(80)
Proceeds from sale of equity investments		69	151	64
Contingent consideration paid		(113)	(153)	(91)
Purchase of businesses, net of cash acquired	40	(3,571)	_	_
Disposal of businesses	40	104	26	282
Investments in associates and joint ventures	40	(11)	(10)	(15)
Proceeds from disposal of interests in associates	40	`_	3	196
Decrease in liquid investments		1	_	4
Interest received		82	72	64
Dividends from associates, joint ventures and equity investments		7	39	6
Net cash outflow from investing activities		(5,354)	(1,553)	(1,443)
Cash flow from financing activities				
Shares acquired by ESOP Trusts		_	_	(65)
Issue of share capital	36	51	74	56
Purchase of non-controlling interests	30	(7)	(9,320)	(29)
Increase in long-term loans		4,794	10,138	2,233
Repayment of short-term Notes		(4,160)	(2,067)	(2,636)
Increase in/(repayment of) other short-term loans		3,095	81	(564)
		(214)	(28)	(23)
Repayment of lease liabilities		(895)	(766)	(781)
Interest paid		(3,953)	(3,927)	(3,906)
Dividends paid to shareholders				
Distributions to non-controlling interests		(364)	(570)	(779)
Contributions from non-controlling interests		(407)	21	21
Other financing cash flows Net cash outflow from financing activities		(187)	(25)	(6,380)
Net cash outlow from mancing activities		(1,040)	(0,009)	(0,000)
Increase/(decrease) in cash and bank overdrafts	42	826	479	(905)
Cash and bank overdrafts at beginning of year		4,087	3,600	4,605
Exchange adjustments		(82)	8	(100)
Increase/(decrease) in cash and bank overdrafts		826	479	(905)
Cash and bank overdrafts at end of year		4,831	4,087	3,600
Cash and bank overdrafts at end of year comprise:				
Cash and cash equivalents		4,707	3,874	3,833
Cash and cash equivalents Cash and cash equivalents reported in assets held for sale		507	485	
Sacri Sacri Squitaisitis reported in accosts ficial for said		5,214	4,359	3,833
Overdrafts		(383)	(272)	(233)
Otorando		4,831	4,087	3,600
		7,001	7,007	5,000

Notes to the financial statements

1. Presentation of the financial statements

Description of business

GSK is a major global healthcare group which is engaged in the creation and discovery, development, manufacture and marketing of pharmaceutical products, vaccines, over-the-counter (OTC) medicines and health-related consumer products. GSK's principal pharmaceutical products include medicines in the following therapeutic areas: respiratory, HIV, immuno-inflammation, oncology, anti-virals, central nervous system, cardiovascular and urogenital, metabolic, anti-bacterials and dermatology.

Compliance with applicable law and IFRS

The financial statements have been prepared in accordance with the Companies Act 2006, Article 4 of the IAS Regulation and International Financial Reporting Standards (IFRS) and related interpretations, as adopted by the European Union.

The financial statements are also in compliance with IFRS as issued by the International Accounting Standards Board.

Composition of financial statements

The consolidated financial statements are drawn up in Sterling, the functional currency of GlaxoSmithKline plc, and in accordance with IFRS accounting presentation. The financial statements comprise:

- Consolidated income statement
- Consolidated statement of comprehensive income
- Consolidated balance sheet
- Consolidated statement of changes in equity
- Consolidated cash flow statement
- Notes to the financial statements.

Composition of the Group

A list of the subsidiaries and associates which, in the opinion of the Directors, principally affected the amount of profit or net assets of the Group is given in Note 45, 'Principal Group companies'.

Financial period

These financial statements cover the financial year from 1 January to 31 December 2019, with comparative figures for the financial years from 1 January to 31 December 2018 and, where appropriate, from 1 January to 31 December 2017.

Accounting principles and policies

The financial statements have been prepared using the historical cost convention modified by the revaluation of certain items, as stated in the accounting policies, and on a going concern basis.

The financial statements have been prepared in accordance with the Group's accounting policies approved by the Board and described in Note 2, 'Accounting principles and policies'. Information on the application of these accounting policies, including areas of estimation and judgement is given in Note 3, 'Key accounting judgements and estimates'.

The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Adjustment to 2018 retained earnings and non-controlling interests balances

In 2018, the Group acquired Novartis' non-controlling interest in the old Consumer Healthcare Joint Venture. As a result of the transaction, the non-controlling interest ceased to exist and should have been fully eliminated from the consolidated reserves. An adjustment of £579 million has been made between the 2018 closing balances of retained earnings and non-controlling interests to reallocate cumulative translation exchange and eliminate the remaining non-controlling interest balance. There was no impact on profit for the year, other comprehensive income, net assets or total equity for 2018 and no impact on any items in earlier years. The effect of the adjustment on the relevant equity balances was as follows:

	At 31 December 2018, as reported £m	Adjustment £m	At 31 December 2018, as revised £m
Retained earnings	(2,137)	(579)	(2,716)
Shareholders' equity	4,360	(579)	3,781
Non-controlling interests	(688)	579	(109)
Total equity	3,672	-	3,672

Implementation of IFRS 16 'Leases'

The Group has applied IFRS 16 'Leases' with effect from 1 January 2019. IFRS 16 introduces new requirements for the definition of a lease, lessee accounting and lessor accounting as well as a number of new disclosures.

In general, all leases within the scope of IFRS 16 are required to be brought on to the balance sheet by lessees, recognising a 'right-of-use' asset and a related lease liability at the commencement of the lease. The subsequent accounting is similar to the finance lease model set out in IAS 17. IFRS 16 establishes a control model for the identification of leases, distinguishing between leases and service contracts on the basis of whether there is an identified asset controlled by the customer.

GSK has adopted IFRS 16 applying the modified retrospective approach, and accordingly prior year results have not been restated. For larger leases (leases with annual payments of £1 million or more), the right of use asset at 1 January 2019 was calculated based on the original lease inception date and for smaller leases (leases with annual payments of less than £1 million) the right of use asset was set equal to the lease liability at 1 January 2019, adjusted for any prepaid or accrued lease payments, onerous lease provisions and business combination fair value adjustments. Any difference between the previous carrying amount and the revised carrying amount at 1 January 2019 has been recognised as an adjustment to opening retained earnings at 1 January 2019.

1. Presentation of the financial statements continued

The Group has applied the definition of a lease and related guidance set out in IFRS 16 to all lease contracts entered into either before the date of initial application or after. There have been no significant changes as a result for the vast majority of contracts.

The following permitted practical expedients were applied at transition:

- The right-of-use asset at the date of transition was adjusted by the amount of the existing onerous lease provision at 31 December 2018, without re-assessment.
- Leases ending within 12 months of the transition date were treated as short-term leases on a lease-by-lease basis.
- Initial direct costs were excluded from the measurement of the right of use asset at the transition date on a lease-bylease basis.
- Hindsight was applied, such as in determining the lease term where contracts contained options to extend or terminate the lease.

The weighted average incremental borrowing rate applied to lease liabilities recognised on 1 January 2019 was 3.13%.

Impact of IFRS 16 on each balance sheet line item

The table below shows the amount of adjustment for each financial statement line item affected by the application of IFRS 16 at 1 January 2019.

	As reported £m	IFRS 16 adjustments £m	As adjusted £m
Non-current assets			
Property, plant and equipment	11,058	(98)	10,960
Right of use assets	_	1,071	1,071
Other non-current assets	1,576	(11)	1,565
Deferred tax assets	3,887	39	3,926
Current assets			
Trade and other receivables	6,423	3	6,426
Current liabilities			
Trade and other payables	(14,037)	10	(14,027)
Provisions	(732)	32	(700)
Short-term borrowings	(5,793)	(229)	(6,022)
Non-current liabilities			
Long-term borrowings	(20,271)	(1,074)	(21,345)
Other non-current liabilities	(938)	160	(778)
Provisions	(691)	3	(688)
Deferred tax liabilities	(1,156)	1	(1,155)
Total effect on net assets	3,672	(93)	3,579
Retained earnings, as revised	(2,716)	(93)	(2,809)
Total effect on equity	3,672	(93)	3,579

The £98 million reduction in property, plant and equipment arose from the transfer of asset retirement obligations and existing finance leases to right of use assets. The £160 million adjustment to other non-current liabilities arose from business combination fair value adjustments which were derecognised on the transition to IFRS 16 with a corresponding adjustment to right of use assets.

The application of IFRS 16 has had no material impact on the Group's income statement and earnings per share, or on overall cash flows for the Group. However, the presentation of the lease payments in the cash flow statement has changed, resulting in an increase to the net cash inflow from operating activities, and hence free cash flow, and a corresponding increase in the net cash outflow from financing items (split between interest paid and repayment of lease liabilities).

The reconciliation between operating lease commitments previously reported for the year ended 31 December 2018, discounted at the Group's incremental borrowing rate, and the lease liabilities recognised in the balance sheet on initial application of IFRS 16 is as follows:

	£m
Operating lease commitments at 31 December 2018	1,138
Effect of discounting at the Group's incremental borrowing rate at 1 January 2019	(126)
Reasonably certain extension options	254
Termination options not reasonably certain to be exercised	46
Short-term leases	(2)
Other adjustments	(7)
Lease liabilities recognised at 1 January 2019	1,303

Parent company financial statements

The financial statements of the parent company, GlaxoSmithKline plc, have been prepared in accordance with UK GAAP and with UK accounting presentation. The company balance sheet is presented on page 252 and the accounting policies are given on pages 253 and 254.

2. Accounting principles and policies

Consolidation

The consolidated financial statements include:

- the assets and liabilities, and the results and cash flows, of the company and its subsidiaries, including ESOP Trusts
- the Group's share of the results and net assets of associates and joint ventures
- the Group's share of assets, liabilities, revenue and expenses of joint operations.

The financial statements of entities consolidated are made up to 31 December each year.

Entities over which the Group has the power to direct the relevant activities so as to affect the returns to the Group, generally through control over the financial and operating policies, are accounted for as subsidiaries.

Where the Group has the ability to exercise joint control over, and rights to, the net assets of entities, the entities are accounted for as joint ventures. Where the Group has the ability to exercise joint control over an arrangement, but has rights to specified assets and obligations for specified liabilities of the arrangement, the arrangement is accounted for as a joint operation. Where the Group has the ability to exercise significant influence over entities, they are accounted for as associates. The results and assets and liabilities of associates and joint ventures are incorporated into the consolidated financial statements using the equity method of accounting. The Group's rights to assets, liabilities, revenue and expenses of joint operations are included in the consolidated financial statements in accordance with those rights and obligations.

Interests acquired in entities are consolidated from the date the Group acquires control and interests sold are de-consolidated from the date control ceases.

Transactions and balances between subsidiaries are eliminated and no profit before tax is taken on sales between subsidiaries until the products are sold to customers outside the Group. The relevant proportion of profits on transactions with joint ventures, joint operations and associates is also deferred until the products are sold to third parties. Transactions with noncontrolling interests are recorded directly in equity. Deferred tax relief on unrealised intra-Group profit is accounted for only to the extent that it is considered recoverable.

Business combinations

Business combinations are accounted for using the acquisition accounting method. Identifiable assets, liabilities and contingent liabilities acquired are measured at fair value at acquisition date. The consideration transferred is measured at fair value and includes the fair value of any contingent consideration.

The fair value of contingent consideration liabilities are reassessed at each balance sheet date with changes recognised in the income statement. Payments of contingent consideration reduce the balance sheet liability and as a result are not recorded in the income statement.

The part of each payment relating to the original estimate of the fair value of the contingent consideration on acquisition is reported within investing activities in the cash flow statement and the part of each payment relating to the increase in the liability since the acquisition date is reported within operating cash flows.

Where the consideration transferred, together with the noncontrolling interest, exceeds the fair value of the net assets, liabilities and contingent liabilities acquired, the excess is recorded as goodwill. The costs of effecting an acquisition are charged to the income statement in the period in which they are incurred.

Goodwill is capitalised as a separate item in the case of subsidiaries and as part of the cost of investment in the case of joint ventures and associates. Goodwill is denominated in the currency of the operation acquired.

Where the cost of acquisition is below the fair value of the net assets acquired, the difference is recognised directly in the income statement.

Where not all of the equity of a subsidiary is acquired the non-controlling interest is recognised either at fair value or at the non-controlling interest's share of the net assets of the subsidiary, on a case-by-case basis. Changes in the Group's ownership percentage of subsidiaries are accounted for within equity.

Foreign currency translation

Foreign currency transactions are booked in the functional currency of the Group company at the exchange rate ruling on the date of transaction. Foreign currency monetary assets and liabilities are retranslated into the functional currency at rates of exchange ruling at the balance sheet date. Exchange differences are included in the income statement.

On consolidation, assets and liabilities, including related goodwill, of overseas subsidiaries, associates and joint ventures, are translated into Sterling at rates of exchange ruling at the balance sheet date. The results and cash flows of overseas subsidiaries, associates and joint ventures are translated into Sterling using average rates of exchange.

Exchange adjustments arising when the opening net assets and the profits for the year retained by overseas subsidiaries, associates and joint ventures are translated into Sterling, less exchange differences arising on related foreign currency borrowings which hedge the Group's net investment in these operations, are taken to a separate component of equity.

When translating into Sterling the assets, liabilities, results and cash flows of overseas subsidiaries, associates and joint ventures which are reported in currencies of hyper-inflationary economies, adjustments are made where material to reflect current price levels. Any loss on net monetary assets is charged to the consolidated income statement.

Investor information

Notes to the financial statements continued

2. Accounting principles and policies continued

Revenue (applicable from 1 January 2018)

The Group receives revenue for supply of goods to external customers against orders received. The majority of contracts that GSK enters into relate to sales orders containing single performance obligations for the delivery of pharmaceutical, vaccine and consumer healthcare products. The average duration of a sales order is less than 12 months.

Product revenue is recognised when control of the goods is passed to the customer. The point at which control passes is determined by each customer arrangement, but generally occurs on delivery to the customer.

Product revenue represents net invoice value including fixed and variable consideration. Variable consideration arises on the sale of goods as a result of discounts and allowances given and accruals for estimated future returns and rebates. Revenue is not recognised in full until it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The methodology and assumptions used to estimate rebates and returns are monitored and adjusted regularly in the light of contractual and legal obligations, historical trends, past experience and projected market conditions. Once the uncertainty associated with the returns and rebates is resolved, revenue is adjusted accordingly.

GSK enters into development and marketing collaborations and out-licences of the Group's compounds or products to other parties. These contracts give rise to fixed and variable consideration from upfront payments, development milestones, sales-based milestones and royalties.

Income dependent on the achievement of a development milestone is recognised when it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur, which is usually when the related event occurs. Sales-based milestone income is recognised when it is highly probable that the sales threshold will be reached.

Sales-based royalties on a licence of intellectual property are not recognised until the relevant product sale occurs.

If the time between the recognition of revenue and payment from the customer is expected to be more than one year and the impact is material, the amount of consideration is discounted using appropriate discount rates.

Value added tax and other sales taxes are excluded from revenue.

Expenditure

Expenditure is recognised in respect of goods and services received when supplied in accordance with contractual terms. Provision is made when an obligation exists for a future liability in respect of a past event and where the amount of the obligation can be reliably estimated. Manufacturing start-up costs between validation and the achievement of normal production are expensed as incurred.

Advertising and promotion expenditure is charged to the income statement as incurred. Shipment costs on inter-company transfers are charged to cost of sales; distribution costs on sales to customers are included in selling, general and administrative expenditure.

Restructuring costs are recognised and provided for, where appropriate, in respect of the direct expenditure of a business reorganisation where the plans are sufficiently detailed and well advanced, and where appropriate communication to those affected has been undertaken.

Research and development

Research and development expenditure is charged to the income statement in the period in which it is incurred. Development expenditure is capitalised when the criteria for recognising an asset are met, usually when a regulatory filing has been made in a major market and approval is considered highly probable. Property, plant and equipment used for research and development is capitalised and depreciated in accordance with the Group's policy.

Environmental expenditure

Environmental expenditure related to existing conditions resulting from past or current operations and from which no current or future benefit is discernible is charged to the income statement. The Group recognises its liability on a site-by-site basis when it can be reliably estimated. This liability includes the Group's portion of the total costs and also a portion of other potentially responsible parties' costs when it is probable that they will not be able to satisfy their respective shares of the clean-up obligation. Recoveries of reimbursements are recorded as assets when virtually certain.

Legal and other disputes

Provision is made for the anticipated settlement costs of legal or other disputes against the Group where an outflow of resources is considered probable and a reliable estimate can be made of the likely outcome. In respect of product liability claims related to certain products, provision is made when there is sufficient history of claims made and settlements to enable management to make a reliable estimate of the provision required to cover unasserted claims. In certain cases, an incurred but not reported (IBNR) actuarial technique is used to determine this estimate. In addition, provision is made for legal or other expenses arising from claims received or other disputes.

The Group may become involved in legal proceedings, in respect of which it is not possible to make a reliable estimate of the expected financial effect, if any, that could result from ultimate resolution of the proceedings. In these cases, appropriate disclosure about such cases would be included but no provision would be made.

Costs associated with claims made by the Group against third parties are charged to the income statement as they are incurred.

2. Accounting principles and policies continued

Pensions and other post-employment benefits

The costs of providing pensions under defined benefit schemes are calculated using the projected unit credit method and spread over the period during which benefit is expected to be derived from the employees' services, consistent with the advice of qualified actuaries. Pension obligations are measured as the present value of estimated future cash flows discounted at rates reflecting the yields of high-quality corporate bonds. Pension scheme assets are measured at fair value at the balance sheet date.

The costs of other post-employment liabilities are calculated in a similar way to defined benefit pension schemes and spread over the period during which benefit is expected to be derived from the employees' services, in accordance with the advice of qualified actuaries.

Actuarial gains and losses and the effect of changes in actuarial assumptions are recognised in the statement of comprehensive income in the year in which they arise.

The Group's contributions to defined contribution plans are charged to the income statement as incurred.

Employee share plans

Incentives in the form of shares are provided to employees under share option and share award schemes.

The fair values of these options and awards are calculated at their grant dates using a Black-Scholes option pricing model and charged to the income statement over the relevant vesting periods.

The Group provides finance to ESOP Trusts to purchase company shares to meet the obligation to provide shares when employees exercise their options or awards. Costs of running the ESOP Trusts are charged to the income statement. Shares held by the ESOP Trusts are deducted from other reserves. A transfer is made between other reserves and retained earnings over the vesting periods of the related share options or awards to reflect the ultimate proceeds receivable from employees on exercise.

Property, plant and equipment

Property, plant and equipment (PP&E) is stated at the cost of purchase or construction, less provisions for depreciation and impairment. Financing costs are capitalised within the cost of qualifying assets in construction.

Depreciation is calculated to write off the cost less residual value of PP&E, excluding freehold land, using the straight-line basis over the expected useful life. Residual values and lives are reviewed, and where appropriate adjusted annually. The normal expected useful lives of the major categories of PP&E are:

Freehold buildings	20 to 50 years
Leasehold land and buildings	Lease term or 20 to 50 years
Plant and machinery	10 to 20 years
Equipment and vehicles	3 to 10 years

On disposal of PP&E, the cost and related accumulated depreciation and impairments are removed from the financial statements and the net amount, less any proceeds, is taken to the income statement.

Leases (applicable from 1 January 2019)

The Group recognises right of use assets under lease arrangements in which it is the lessee. Rights to use assets owned by third parties under lease agreements are capitalised at the inception of the lease and recognised on the consolidated balance sheet. The corresponding liability to the lessor is recognised as a lease obligation within short and long-term borrowings. The carrying amount is subsequently increased to reflect interest on the lease liability and reduced by lease payments made.

For calculating the discounted lease liability on leases with annual payments of £2 million or more, the implicit rate in the lease is used. If this is not available, the incremental borrowing rate with a lease specific adjustment is used. If neither of these is available, and for leases with annual payments of less than £2 million, the incremental borrowing rate is used. The incremental borrowing rate is calculated at the rate of interest at which GSK would have been able to borrow for a similar term and with a similar security the funds necessary to obtain a similar asset in a similar market.

Finance costs are charged to the income statement so as to produce a constant periodic rate of charge on the remaining balance of the obligations for each accounting period.

Variable rents are not part of the lease liability and the right of use asset. These payments are charged to the income statement as incurred. Short-term and low-value leases are not capitalised and lease rentals are also charged to the income statement as incurred.

Non-lease components are accounted for separately from the lease components in plant and equipment leases but are not separately accounted for in land and buildings or vehicle leases.

If modifications or reassessments occur, the lease liability and right of use asset are re-measured.

Right of use assets where title is expected to pass to GSK at a point in the future are depreciated on a basis consistent with similar owned assets. In other cases, right of use assets are depreciated over the shorter of the useful life of the asset or the lease term.

Goodwill

Goodwill is stated at cost less impairments. Goodwill is deemed to have an indefinite useful life and is tested for impairment at least annually.

Where the fair value of the interest acquired in an entity's assets, liabilities and contingent liabilities exceeds the consideration paid, this excess is recognised immediately as a gain in the income statement.

Investor information

Notes to the financial statements continued

2. Accounting principles and policies continued

Other intangible assets

Intangible assets are stated at cost less provisions for amortisation and impairments.

Licences, patents, know-how and marketing rights separately acquired or acquired as part of a business combination are amortised over their estimated useful lives, generally not exceeding 20 years, using the straight-line basis, from the time they are available for use. The estimated useful lives for determining the amortisation charge take into account patent lives, where applicable, as well as the value obtained from periods of non-exclusivity. Asset lives are reviewed, and where appropriate adjusted, annually.

Contingent milestone payments are recognised at the point that the contingent event becomes probable. Any development costs incurred by the Group and associated with acquired licences, patents, know-how or marketing rights are written off to the income statement when incurred, unless the criteria for recognition of an internally-generated intangible asset are met, usually when a regulatory filing has been made in a major market and approval is considered highly probable.

Acquired brands are valued independently as part of the fair value of businesses acquired from third parties where the brand has a value which is substantial and long-term and where the brands either are contractual or legal in nature or can be sold separately from the rest of the businesses acquired. Brands are amortised over their estimated useful lives of up to 20 years, except where it is considered that the useful economic life is indefinite.

The costs of acquiring and developing computer software for internal use and internet sites for external use are capitalised as intangible fixed assets where the software or site supports a significant business system and the expenditure leads to the creation of a durable asset. ERP systems software is amortised over seven to ten years and other computer software over three to five years.

Impairment of non-current assets

The carrying values of all non-current assets are reviewed for impairment, either on a stand-alone basis or as part of a larger cash generating unit, when there is an indication that the assets might be impaired. Additionally, goodwill, intangible assets with indefinite useful lives and intangible assets which are not yet available for use are tested for impairment annually. Any provision for impairment is charged to the income statement in the year concerned.

Impairments of goodwill are not reversed. Impairment losses on other non-current assets are only reversed if there has been a change in estimates used to determine recoverable amounts and only to the extent that the revised recoverable amounts do not exceed the carrying values that would have existed, net of depreciation or amortisation, had no impairments been recognised.

Investments in associates, joint ventures and joint operations

Investments in associates and joint ventures are carried in the consolidated balance sheet at the Group's share of their net assets at date of acquisition and of their post-acquisition retained profits or losses together with any goodwill arising on the acquisition. The Group recognises its rights to assets, liabilities, revenue and expenses of joint operations.

Inventories

Inventories are included in the financial statements at the lower of cost (including raw materials, direct labour, other direct costs and related production overheads) and net realisable value. Cost is generally determined on a first in, first out basis. Pre-launch inventory is held as an asset when there is a high probability of regulatory approval for the product. Before that point a provision is made against the carrying value to its recoverable amount; the provision is then reversed at the point when a high probability of regulatory approval is determined.

Financial instruments (applicable from 1 January 2018)

Financial assets

Financial assets are measured at amortised cost, fair value through other comprehensive income (FVTOCI) or fair value through profit or loss (FVTPL). The measurement basis is determined by reference to both the business model for managing the financial asset and the contractual cash flow characteristics of the financial asset. For financial assets other than trade receivables a 12-month expected credit loss (ECL) allowance is recorded on initial recognition. If there is subsequent evidence of a significant increase in the credit risk of an asset, the allowance is increased to reflect the full lifetime ECL. If there is no realistic prospect of recovery, the asset is written off.

Expected credit losses are recognised in the income statement on financial assets measured at amortised cost and at fair value through other comprehensive income apart from equity investments.

Other investments

Other investments comprise equity investments and investments in limited life funds. The Group has elected to designate equity investments as measured at FVTOCI. They are initially recorded at fair value plus transaction costs and then remeasured at subsequent reporting dates to fair value. Unrealised gains and losses are recognised in other comprehensive income.

On disposal of the equity investment, gains and losses that have been deferred in Other comprehensive income are transferred directly to retained earnings. Investments in limited life funds are measured at FVTPL. They are initially recorded at fair value and then remeasured at subsequent reporting dates to fair value. Unrealised gains and losses are recognised in the income statement.

2. Accounting principles and policies continued

Dividends on equity investments and distributions from funds are recognised in the income statement when the Group's right to receive payment is established.

Purchases and sales of Other investments are accounted for on the trade date.

Trade receivables

Trade receivables are measured in accordance with the business model under which each portfolio of trade receivables is held. The Group has portfolios in each of the three business models under IFRS 9 due to factoring arrangements in place: to collect the contractual cash flows (measured at amortised cost), to sell the contractual cash flows (measured at FVTPL), and both to collect and to sell the contractual cash flows (measured at FVTOCI). Trade receivables measured at amortised cost are carried at the original invoice amount less allowances for expected credit losses.

Expected credit losses are calculated in accordance with the simplified approach permitted by IFRS 9, using a provision matrix applying lifetime historical credit loss experience to the trade receivables. The expected credit loss rate varies depending on whether, and the extent to which, settlement of the trade receivables is overdue and it is also adjusted as appropriate to reflect current economic conditions and estimates of future conditions. For the purpose of determining credit loss rates, customers are classified into groupings that have similar loss patterns. The key drivers of the loss rate are the nature of the business unit and the location and type of customer.

When a trade receivable is determined to have no reasonable expectation of recovery it is written off, firstly against any expected credit loss allowance available and then to the income statement.

Subsequent recoveries of amounts previously provided for or written off are credited to the income statement. Long-term receivables are discounted where the effect is material.

Cash and cash equivalents

Cash held in deposit accounts is measured at amortised cost. Investments in money market funds are held at fair value through profit or loss because the funds fail the solely payments of principal and interest (SPPI) test.

Borrowings

All borrowings are initially recorded at the amount of proceeds received, net of transaction costs. Borrowings are subsequently carried at amortised cost, with the difference between the proceeds, net of transaction costs, and the amount due on redemption being recognised as a charge to the income statement over the period of the relevant borrowing.

Derivative financial instruments

Derivative financial instruments are used to manage exposure to market risks. The principal derivative instruments used by GSK are foreign currency swaps, interest rate swaps, foreign exchange forward contracts and options. The Group does not hold or issue derivative financial instruments for trading or speculative purposes.

Derivative financial assets and liabilities, including derivatives embedded in host contracts which have been separated from the host contract, are classified as held-for-trading and are measured at fair value. Changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognised immediately in the income statement.

Hedge accounting

Derivatives designated as hedging instruments are classified at inception of hedge relationship as cash flow hedges, net investment hedges or fair value hedges.

Changes in the fair value of derivatives designated as cash flow hedges are recognised in other comprehensive income to the extent that the hedges are effective. Ineffective portions are recognised in profit or loss immediately. Amounts deferred in other comprehensive income are reclassified to the income statement when the hedged item affects profit or loss.

Net investment hedges are accounted for in a similar way to cash flow hedges.

Changes in the fair value of derivatives designated as fair value hedges are recorded in the income statement, together with the changes in the fair value of the hedged asset or liability.

Taxation

Current tax is provided at the amounts expected to be paid, applying tax rates that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is provided in full, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Deferred tax is provided on temporary differences arising on investments in subsidiaries, associates and joint ventures, except where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax is provided using rates of tax that have been enacted or substantively enacted by the balance sheet date.

Where an uncertain tax position is identified, management will make a judgement as to what the probable outcome will be, assuming the relevant tax authority has full knowledge of the situation. Where it is assessed that an economic outflow is probable to arise a provision is made for the best estimate of the liability. In estimating any such liability GSK applies a risk-based approach which takes into account, as appropriate, the probability that the Group would be able to obtain compensatory adjustments under international tax treaties. These estimates take into account the specific circumstances of each dispute and relevant external advice.

Discounting

Where the time value of money is material, balances are discounted to current values using appropriate discount rates. The unwinding of the discounts is recorded in finance income and finance expense.

Investor information

Notes to the financial statements continued

2. Accounting principles and policies continued

Revenue (applicable up to 31 December 2017)

Revenue is recognised in the income statement when goods or services are supplied or made available to external customers against orders received, title and risk of loss is passed to the customer, reliable estimates can be made of relevant deductions and all relevant obligations have been fulfilled, such that the earnings process is regarded as being complete.

Turnover represents net invoice value after the deduction of discounts and allowances given and accruals for estimated future rebates and returns. The methodology and assumptions used to estimate rebates and returns are monitored and adjusted regularly in the light of contractual and legal obligations, historical trends, past experience and projected market conditions. Market conditions are evaluated using wholesaler and other third-party analyses, market research data and internally-generated information. Value added tax and other sales taxes are excluded from revenue.

Where the Group co-promotes a product and the counterparty records the sale, the Group records its share of revenue as co-promotion income within turnover. The nature of co-promotion activities is such that the Group records no costs of sales. In addition, initial or event-based milestone income (excluding royalty income) arising on development or marketing collaborations of the Group's compounds or products with other parties is recognised in turnover.

Royalty income is recognised on an accruals basis in accordance with the terms of the relevant licensing agreements.

Financial instruments (applicable up to 31 December 2017)

Available-for-sale investments

Liquid investments and other investments are classified as available-for-sale investments and are initially recorded at fair value plus transaction costs and then remeasured at subsequent reporting dates to fair value. Unrealised gains and losses on available-for-sale investments are recognised directly in other comprehensive income. Impairments arising from the significant or prolonged decline in fair value of an equity investment reduce the carrying amount of the asset directly and are charged to the income statement.

On disposal or impairment of the investments, any gains and losses that have been deferred in other comprehensive income are reclassified to the income statement. Dividends on equity investments are recognised in the income statement when the Group's right to receive payment is established. Equity investments are recorded in non-current assets unless they are expected to be sold within one year.

Purchases and sales of equity investments are accounted for on the trade date and purchases and sales of other available-forsale investments are accounted for on settlement date.

Trade receivables

Trade receivables are carried at original invoice amount less any provisions for doubtful debts. Provisions are made where there is evidence of a risk of non-payment, taking into account ageing, previous experience and general economic conditions.

When a trade receivable is determined to be uncollectable it is written off, firstly against any provision available and then to the income statement.

Subsequent recoveries of amounts previously provided for are credited to the income statement. Long-term receivables are discounted where the effect is material.

Borrowings

All borrowings are initially recorded at the amount of proceeds received, net of transaction costs. Borrowings are subsequently carried at amortised cost, with the difference between the proceeds, net of transaction costs, and the amount due on redemption being recognised as a charge to the income statement over the period of the relevant borrowing.

Derivative financial instruments and hedging

Derivative financial instruments are used to manage exposure to market risks. The principal derivative instruments used by GSK are foreign currency swaps, interest rate swaps, foreign exchange forward contracts and options. The Group does not hold or issue derivative financial instruments for trading or speculative purposes.

Derivative financial instruments are classified as held-for-trading and are carried in the balance sheet at fair value. Derivatives designated as hedging instruments are classified on inception as cash flow hedges, net investment hedges or fair value hedges.

Changes in the fair value of derivatives designated as cash flow hedges are recognised in other comprehensive income to the extent that the hedges are effective. Ineffective portions are recognised in profit or loss immediately. Amounts deferred in other comprehensive income are reclassified to the income statement when the hedged item affects profit or loss.

Net investment hedges are accounted for in a similar way to cash flow hedges.

Changes in the fair value of derivatives designated as fair value hedges are recorded in the income statement, together with the changes in the fair value of the hedged asset or liability.

Changes in the fair value of any derivative instruments that do not qualify for hedge accounting are recognised immediately in the income statement.

Leases (applicable up to 31 December 2018)

Leasing agreements which transfer to the Group substantially all the benefits and risks of ownership of an asset are treated as finance leases, as if the asset had been purchased outright. The assets are included in PP&E or computer software and the capital elements of the leasing commitments are shown as obligations under finance leases. Assets held under finance leases are depreciated on a basis consistent with similar owned assets or the lease term, if shorter. The interest element of the lease rental is included in the income statement. All other leases are operating leases and the rental costs are charged to the income statement on a straight-line basis over the lease term.

3. Key accounting judgements and estimates

In preparing the financial statements, management is required to make judgements about when or how items should be recognised in the financial statements and estimates and assumptions that affect the amounts of assets, liabilities, revenue and expenses reported in the financial statements. Actual amounts and results could differ from those estimates. The following are considered to be the critical accounting judgements and key sources of estimation uncertainty.

Turnover

Reported Group turnover for 2019 was £33,754 million (2018 – £30,821 million).

Estimates

Gross turnover is reduced by rebates, discounts, allowances and product returns given or expected to be given, which vary by product arrangements and buying groups. These arrangements with purchasing organisations are dependent upon the submission of claims some time after the initial recognition of the sale. Accruals are made at the time of sale for the estimated rebates, discounts or allowances payable or returns to be made, based on available market information and historical experience.

The US Pharmaceuticals business has the largest and most complex arrangements for rebates, discounts and allowances. The US Pharmaceuticals turnover for 2019 of £7,402 million (2018 – £7,453 million) was after recording deductions of £11,069 million (2018 – £10,774 million) for rebates, discounts, allowances and returns. The balance sheet accruals for rebates, discounts, allowances and returns for the US Pharmaceuticals and Vaccines businesses are managed on a combined basis. At 31 December 2019, the total accrual amounted to £4,200 million (2018 – £4,356 million). Because of the nature of these accruals it is not practicable to give meaningful sensitivity estimates.

Because the amounts are estimated they may not fully reflect the final outcome, and the amounts are subject to change dependent upon, amongst other things, the types of buying group and product sales mix.

The level of accrual for rebates and returns is reviewed and adjusted regularly in the light of contractual and legal obligations, historical trends, past experience and projected market conditions. Market conditions are evaluated using wholesaler and other third-party analyses, market research data and internally-generated information. Revenue is not recognised in full until it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The amount of turnover recognised in the year from performance obligations satisfied in previous periods is set out in Note 6, 'Turnover and segment information'.

Future events could cause the assumptions on which the accruals are based to change, which could materially affect the future results of the Group.

Taxation

The tax charge for the year was £953 million (2018 – £754 million). At December 2019, current tax payable was £629 million (2018 – £965 million), non-current corporation tax payable was £189 million (2018 – £272 million) and current tax recoverable was £262 million (2018 – £229 million).

Fstimates

The Group has open tax issues with a number of revenue authorities. Management makes a judgement of whether there is sufficient information to be able to make a reliable estimate of the outcome of the dispute. If insufficient information is available, no provision is made.

If sufficient information is available, in estimating a potential tax liability GSK applies a risk-based approach which takes into account, as appropriate, the probability that the Group would be able to obtain compensatory adjustments under international tax treaties. These estimates take into account the specific circumstances of each dispute and relevant external advice, are inherently judgemental and could change substantially over time as each dispute progresses and new facts emerge.

At 31 December 2019, the Group had recognised provisions of £933 million in respect of uncertain tax positions (2018 – £1,082 million). Because of the nature of these uncertain positions, it is not practicable to give meaningful sensitivity estimates.

Factors affecting the tax charge in future years are set out in Note 14, 'Taxation'. GSK continues to believe that it has made adequate provision for the liabilities likely to arise from open assessments. Where open issues exist, the ultimate liability for such matters may vary from the amounts provided and is dependent upon the outcome of negotiations with the relevant tax authorities or, if necessary, litigation proceedings.

Legal and other disputes

Legal costs for the year were £363 million (2018 – £117 million). At 31 December 2019 provisions for legal and other disputes amounted to £198 million (2018 – £219 million).

Estimates

Management makes a judgement of whether there is sufficient information to be able to make a reliable estimate of the likely outcome of the dispute and the legal and other expenses arising from claims against the Group. If insufficient information is available, no provision is made and disclosure of the claim is given.

The estimated provisions take into account the specific circumstances of each dispute and relevant external advice, are inherently judgemental and could change substantially over time as each dispute progresses and new facts emerge. Details of the status and various uncertainties involved in the significant unresolved disputes are set out in Note 46, 'Legal proceedings'.

3. Key accounting judgements and estimates continued

The company's Directors, having taken legal advice, have established provisions after taking into account the relevant facts and circumstances of each matter and in accordance with accounting requirements. In respect of product liability claims related to certain products, there is sufficient history of claims made and settlements to enable management to make a reliable estimate of the provision required to cover unasserted claims. The Group may become involved in legal proceedings, in respect of which it is not possible to make a reliable estimate of the expected financial effect, if any, or practicable to give a meaningful range of outcomes that could result from ultimate resolution of the proceedings. In these cases, appropriate disclosure about such cases would be provided, but no provision would be made and no contingent liability can be quantified.

The ultimate liability for legal claims may vary from the amounts provided and is dependent upon the outcome of litigation proceedings, investigations and possible settlement negotiations. The position could change over time and, therefore, there can be no assurance that any losses that result from the outcome of any legal proceedings will not exceed the amount of the provisions reported in the Group's financial statements by a material amount.

Contingent consideration

The 2019 income statement charge for contingent consideration was £83 million (2018 – £1,251 million).

At 31 December 2019, the liability for contingent consideration amounted to £5,479 million (2018 – £6,286 million). Of this amount, £5,103 million (2018 – £5,937 million) related to the acquisition of the former Shionogi-ViiV Healthcare joint venture in 2012.

Estimates

Any contingent consideration included in the consideration payable for a business combination is recorded at fair value at the date of acquisition. These fair values are generally based on risk-adjusted future cash flows discounted using appropriate post-tax discount rates. The fair values are reviewed on a regular basis, at least annually, and any changes are reflected in the income statement. See Note 32, 'Contingent consideration liabilities'.

Pensions and other post-employment benefits

Judgement

Where a surplus on a defined benefit scheme arises, or there is potential for a surplus to arise from committed future contributions, the rights of the Trustees to prevent the Group obtaining a refund of that surplus in the future are considered in determining whether it is necessary to restrict the amount of the surplus that is recognised. Two UK schemes are in surplus, with a combined surplus of £70 million at 31 December 2019 (2018 – £711 million). GSK has made the judgement that these amounts meet the requirements of recoverability.

Estimates

The costs of providing pensions and other post-employment benefits are assessed on the basis of assumptions selected by management. These assumptions include future earnings and pension increases, discount rates, expected long-term rates of return on assets and mortality rates, and are disclosed in Note 30, 'Pensions and other post-employment benefits'.

Discount rates are derived from AA rated corporate bond yields except in countries where there is no deep market in corporate bonds where government bond yields are used. A sensitivity analysis is provided in Note 30, 'Pensions and other postemployment benefits', but a 0.5% reduction in the discount rate would lead to an increase in the net pension deficit of approximately £1,640 million and an increase in the annual pension cost of approximately £43 million. The selection of different assumptions could affect the future results of the Group.

4. New accounting requirements

The following new and amended accounting standards have been issued by the IASB and are likely to affect future Annual Reports.

An amendment to IFRS 3 'Business combinations' was issued in October 2018 and will be implemented by the Group in 2020. The amendment clarifies the definition of a business and permits a simplified initial assessment of whether an acquired set of activities and assets is a group of assets rather than a business.

The amendment will apply prospectively to acquisitions completed after its implementation date and will not change the accounting for any acquisitions before that date.

'Interest rate benchmark reform – Amendments to IFRS 9, IAS 39 and IFRS 7' was issued in September 2019 and will be implemented by the Group from 1 January 2020. These amendments modify specific hedge accounting requirements to allow hedge accounting to continue for affected hedges during the period of uncertainty before the hedged items or hedging instruments referencing the current interest rate benchmarks are amended as a result of the ongoing interest rate benchmark reforms.

The amendments are not expected to have a material impact on the results or financial position of the Group.

5. Exchange rates

The Group uses the average of exchange rates prevailing during the period to translate the results and cash flows of overseas subsidiaries, joint ventures and associates into Sterling and period end rates to translate the net assets of those entities. The currencies which most influence these translations and the relevant exchange rates were:

	2019	2018	2017		2019	2018	2017
Average rates:				Period end rates:			
US\$/£	1.28	1.33	1.30	US\$/£	1.32	1.27	1.35
Euro/£	1.14	1.13	1.15	Euro/£	1.18	1.11	1.13
Yen/£	139	147	145	Yen/£	143	140	152

6. Turnover and segment information

Operating segments are reported based on the financial information provided to the Chief Executive Officer and the responsibilities of the Corporate Executive Team (CET). GSK reports results under four segments: Pharmaceuticals; Pharmaceuticals R&D; Vaccines and Consumer Healthcare, and individual members of the CET are responsible for each segment.

The Group's management reporting process allocates intra-Group profit on a product sale to the market in which that sale is recorded, and the profit analyses below have been presented on that basis.

Corporate and other unallocated turnover and costs included the results of certain Consumer Healthcare products which are being held for sale in a number of markets in order to meet anti-trust approval requirements, together with the costs of corporate functions.

Revenue recognised in the year from performance obligations satisfied in previous periods totalled £793 million (2018 – £426 million) and included £451 million (2018 – £122 million) reported in turnover arising from changes to prior year estimates of RAR accruals and £328 million (2018 – £299 million) of royalty income.

	2019	2018	2017
Turnover by segment	£m	£m	£m
Pharmaceuticals	17,554	17,269	17,276
Vaccines	7,157	5,894	5,160
Consumer Healthcare	8,995	7,658	7,750
Segment turnover	33,706	30,821	30,186
Corporate and other unallocated turnover	48	_	_
	33,754	30,821	30,186

GSK has reviewed the presentation of its respiratory product sales and from 1 January 2019 is reporting the *Ellipta* products portfolio and *Nucala* under the 'Respiratory' category and all other respiratory products under 'Established Pharmaceuticals'. Comparative information has been revised onto a consistent basis.

Pharmaceuticals turnover by therapeutic area	2019 £m	2018 (revised) £m	2017 (revised) £m
Respiratory	3,081	2,612	1,930
HIV	4,854	4,722	4,350
Immuno-inflammation	613	472	377
Oncology	230	_	-
Established Pharmaceuticals	8,776	9,463	10,619
	17,554	17,269	17,276
Vaccines turnover by category	2019 £m	2018 £m	2017 £m
Meningitis	1,018	881	890
Influenza	541	523	488
Shingles	1,810	784	22
Established Vaccines	3,788	3,706	3,760
	7,157	5,894	5,160

Investor information

Notes to the financial statements continued

6. Turnover and segment information continued

During 2019, the US operations of the Pharmaceuticals and Vaccines businesses made sales to three wholesalers of approximately £2,835 million (2018 - £2,709 million, 2017 - £2,449 million), £3,146 million (2018 - £2,962 million, 2017 - £3,043 million) and £2,820 million (2018 – £2,656 million, 2017 – £2,356 million) respectively, after allocating final-customer discounts to the wholesalers.

Consumer Healthcare turnover by category	2019 £m	2018 £m	2017 £m
Wellness	4,526	3,940	4,001
Oral health	2,673	2,496	2,466
Nutrition	1,176	643	680
Skin health	620	579	603
	8,995	7,658	7,750
Segment profit	2019 £m	2018 £m	2017 £m
Pharmaceuticals	7,964	8,420	8,667
Pharmaceuticals R&D	(3,369)	(2,676)	(2,740)
Pharmaceuticals, including R&D	4,595	5,744	5,927
Vaccines	2,966	1,943	1,644
Consumer Healthcare	1,874	1,517	1,373
Segment profit	9,435	9,204	8,944
Corporate and other unallocated costs	(463)	(459)	(376)
Other reconciling items between segment profit and operating profit	(2,011)	(3,262)	(4,481)
Operating profit	6,961	5,483	4,087
Finance income	98	81	65
Finance costs	(912)	(798)	(734)
Profit on disposal of interest in associates	_	3	94
Share of after-tax profits of associates and joint ventures	74	31	13
Profit before taxation	6,221	4,800	3,525
Taxation	(953)	(754)	(1,356)
Profit after taxation for the year	5,268	4,046	2,169

Other reconciling items between segment profit and operating profit comprise items not specifically allocated to segment profit. These include impairment and amortisation of intangible assets; major restructuring costs, which include impairments of tangible assets and computer software; transaction-related adjustments related to significant acquisitions; proceeds and costs of disposals of associates, products and businesses, significant legal charges and expenses on the settlement of litigation and government investigations, other operating income other than royalty income and other items, and the pre-tax impact of the enactment of the US Tax Cuts and Jobs Act.

Depreciation and amortisation by segment	2019 £m	2018 £m	2017 £m
Pharmaceuticals	606	506	551
Pharmaceuticals R&D	230	123	96
Pharmaceuticals, including R&D	836	629	647
Vaccines	418	395	405
Consumer Healthcare	224	146	135
Segment depreciation and amortisation	1,478	1,170	1,187
Corporate and other unallocated depreciation and amortisation	79	106	144
Other reconciling items between segment depreciation and amortisation and			
total depreciation and amortisation	777	580	591
Total depreciation and amortisation	2,334	1,856	1,922

6. Turnover and segment information continued

PP&E, intangible asset and goodwill impairment by segment	2019 £m	2018 £m	2017 £m
Pharmaceuticals	137	51	38
Pharmaceuticals R&D	16	15	10
Pharmaceuticals, including R&D	153	66	48
Vaccines	33	5	13
Consumer Healthcare	_	4	10
Segment impairment	186	75	71
Corporate and other unallocated impairment	19	14	3
Other reconciling items between segment impairment and total impairment	621	261	995
Total impairment	826	350	1,069
Pharmaceuticals R&D	-	(1)	(2)
Pharmaceuticals	(6)	(4)	(13)
	- (0)		
Pharmaceuticals, including R&D	(6)	(5)	(15)
Vaccines	(1)	_	_
Consumer Healthcare	_	_	(1)
Segment impairment reversals	(7)	(5)	(16)
Corporate and other unallocated impairment reversals	(3)	_	-
Other reconciling items between segment impairment reversals and total impairment reversals	(15)	(8)	(36)
Total impairment reversals	(25)	(13)	(52)
Net assets by segment	2019 £m	2018 £m	

Net assets by segment	2019 £m	2018 £m
Pharmaceuticals	1,722	869
Pharmaceuticals R&D	4,503	502
Pharmaceuticals, including R&D	6,225	1,371
Vaccines	8,828	9,966
Consumer Healthcare	26,328	10,559
Segment net operating assets	41,381	21,896
Corporate and other unallocated net operating assets	1,446	1,141
Net operating assets	42,827	23,037
Net debt	(25,215)	(21,621)
Investments in associates and joint ventures	314	236
Derivative financial instruments	335	129
Current and deferred taxation	(270)	1,723
Assets held for sale (excluding cash and cash equivalents)	366	168
Net assets	18,357	3,672

The Pharmaceuticals segment includes the Shionogi-ViiV Healthcare contingent consideration liability of £5,103 million (2018 - £5,937 million) and the Pfizer put option of £1,011 million (2018 - £1,240 million). Net assets in the Pharmaceuticals and Consumer Healthcare segments have increased during the year, following the acquisitions of Tesaro and the Pfizer consumer healthcare business, respectively.

Investor information

Notes to the financial statements continued

6. Turnover and segment information continued

Geographical information

The UK is regarded as being the Group's country of domicile.

	2019	2018	2017
Turnover by location of customer	£m	£m	£m
UK	942	923	940
US	13,890	11,982	11,263
Rest of World	18,922	17,916	17,983
External turnover	33,754	30,821	30,186

Non-current assets by location of subsidiary	2019 £m	2018 £m
UK	6,116	6,118
US	19,483	7,540
Rest of World	27,696	20,768
Non-current assets	53,295	34,426

Non-current assets by location excludes amounts relating to other investments, deferred tax assets, derivative financial instruments, pension assets, amounts receivable under insurance contracts and certain other non-current receivables.

7. Other operating income/(expense)

	2019 £m	2018 £m	2017 £m
Fair value remeasurements of equity investments under IFRS 9	(14)	20	_
Disposal of businesses and assets	541	258	195
Fair value remeasurements on contingent consideration recognised in business combinations	(92)	(1,252)	(1,012)
Remeasurement of ViiV Healthcare put option liabilities and preferential dividends	234	58	13
Remeasurement of Consumer Healthcare put option liability	_	(658)	(1,186)
Fair value adjustments on derivative financial instruments	_	(3)	9
Other income/(expense)	20	(11)	9
Impairment of available-for-sale equity investments under IAS 39	-	_	(30)
Disposal of available-for-sale equity investments under IAS 39	-	_	37
	689	(1,588)	(1,965)

Disposal of businesses and assets in 2019 included a profit on disposal of rabies and tick-borne encephalitis vaccines of £306 million and a gain arising from the increase in value of the shares in Hindustan Unilever Limited to be received on the disposal of Horlicks and other Consumer Healthcare brands of £143 million including fair value movements on related derivatives.

Fair value remeasurements on contingent consideration recognised in business combinations included £31 million related to the acquisition of the former Shionogi-ViiV Healthcare joint venture and £67 million related to the Vaccines acquisition from Novartis, together with fair value movements on related hedging contracts.

8. Operating profit

	2019	2018	2017
The following items have been included in operating profit:	2019 £m	2018 £m	2017 £m
Employee costs (Note 9)	9,855	9,440	9,122
Advertising	1,567	1,376	1,351
Distribution costs	393	389	405
Depreciation of property, plant and equipment	1,017	954	988
Impairment of property, plant and equipment, net of reversals	669	203	327
Depreciation of right of use assets	214		
Impairment of right of use assets	2		
Amortisation of intangible assets	1,103	902	934
Impairment of intangible assets, net of reversals	126	134	690
Impairment of goodwill allocated to a disposal group, net of reversals	4	_	-
Net foreign exchange (gains)/losses	(37)	81	215
Inventories:			
Cost of inventories included in cost of sales	9,482	8,713	8,526
Write-down of inventories	578	695	701
Reversal of prior year write-down of inventories	(230)	(302)	(352)
Short-term lease charge	12		
Low-value lease charge	4		
Variable lease payments	13		
Operating lease rentals:			
Minimum lease payments		188	110
Contingent rents		12	4
Sub-lease payments		5	5
Fees payable to the company's auditor and its associates in relation to the Group (see below)	30.4	29.8	29.2

The reversals of prior year write-downs of inventories principally arise from the reassessment of usage or demand expectations prior to inventory expiration.

Net foreign exchange gains include a net gain of £75 million (2018 – £nil; 2017 – £109 million loss) arising on the reclassification of exchange on liquidation or disposal of overseas subsidiaries.

Included within operating profit are Major restructuring charges of £1,105 million (2018 – £809 million; 2017 – £1,056 million), see Note 10, 'Major restructuring costs'.

	2019	2018	2017
Fees payable to the company's auditor and its associates:	£m	£m	£m
Audit of parent company and consolidated financial statements including attestation under s.404			
of Sarbanes-Oxley Act 2002	15.6	13.3	11.5
Audit of the company's subsidiaries	13.5	12.9	16.2
Total audit services	29.1	26.2	27.7
Taxation compliance	_	0.1	0.2
Taxation advice	_	_	0.1
Audit related and other assurance services	1.2	3.0	1.0
All other services	0.1	0.5	0.2
Total audit-related and non-audit services	1.3	3.6	1.5
	30.4	29.8	29.2

The other assurance services provided by the auditor related to agreed upon procedures and other assurance services outside of statutory audit requirements. All other services provided by the auditor primarily related to advisory services for the year ended 31 December 2019.

In addition to the above, fees paid to the auditor in respect of the GSK pension schemes were:

	2019 £m	2018 £m	2017 £m
Audit	0.2	0.3	0.3
Other services	-	_	0.1

Fees of £0.8 million (2018 – £nil, 2017 – £nil) were also paid to other auditors in respect of audits of certain of the company's subsidiaries acquired during the year.

9. Employee costs

	2019 £m	2018 £m	2017 £m
Wages and salaries	7,583	7,203	7,116
Social security costs	852	795	802
Pension and other post-employment costs, including augmentations (Note 30)	560	586	616
Cost of share-based incentive plans	432	393	347
Severance and other costs from integration and restructuring activities	428	463	241
	9,855	9,440	9,122

The increase in wages and salaries included the impact of movements in exchange rates. The Group provides benefits to employees, commensurate with local practice in individual countries, including, in some markets, healthcare insurance, subsidised car schemes and personal life assurance.

The cost of share-based incentive plans is analysed as follows:

	2019	2018	2017
	£m	£m	£m
Share Value Plan	302	304	276
Performance Share Plan	58	49	47
Share option plans	4	4	4
Cash settled and other plans	68	36	20
	432	393	347

The average monthly number of persons employed by the Group (including Directors) during the year was:

	2019 Number	2018 Number	2017 Number
Manufacturing	36,653	37,296	38,632
Selling, general and administration	48,535	47,887	49,141
Research and development	12,026	11,668	11,576
	97,214	96,851	99,349

The average monthly number of Group employees excludes temporary and contract staff. The numbers of Group employees at the end of each financial year are given in the financial record on page 265.

The compensation of the Directors and Senior Management (members of the CET) in aggregate, was as follows:

	2019	2018	2017
	£m	£m	£m
Wages and salaries	28	29	26
Social security costs	4	3	4
Pension and other post-employment costs	3	3	3
Cost of share-based incentive plans	27	20	22
	62	55	55

Further information on the remuneration of the Directors is given in the Remuneration report on pages 116 to 150.

10. Major restructuring costs

Within the Pharmaceuticals sector, the highly regulated manufacturing operations and supply chains and long lifecycle of the business mean that restructuring programmes, particularly those that involve the rationalisation or closure of manufacturing or R&D sites, are likely to take several years to complete.

Major restructuring costs are those related to specific Board-approved Major restructuring programmes, including integration costs following material acquisitions, which are structural and are of a significant scale where the costs of individual or related projects exceed £25 million.

The existing Combined restructuring and integration programme incorporates the previous Major Change programme, the Pharmaceuticals restructuring programme and the restructuring and integration programme following the Novartis transaction in 2015. This programme is now subsequently complete. In July 2018, the Board-approved a Major restructuring programme, designed to significantly improve the competitiveness and efficiency of the Group's cost base with savings delivered primarily through supply chain optimisation and reductions in administrative costs. In February 2019, the Board-approved a new Major restructuring programme to generate synergies from the integration of the Pfizer consumer healthcare business into GSK's Consumer Healthcare business.

The total restructuring costs of £1,105 million in 2019 were incurred in the following areas:

- Manufacturing site restructuring, including at Worthing, United Kingdom and Cork, Ireland
- Restructuring following the integration of the Pfizer consumer healthcare business into GSK Consumer Healthcare
- Restructuring of the Pharmaceutical and Consumer Healthcare supply chains leading to simplification of the operating model and improved resource allocation
- Continued transformation of central functions, including GSK technology platforms and interfaces, to deliver greater digital synergies, simplification of applications and staff reductions.

The analysis of the costs charged to operating profit under these programmes was as follows:

	2019	2018	2017
	£m	£m	£m
Increase in provision for Major restructuring programmes (see Note 31)	345	450	259
Amount of provision reversed unused (see Note 31)	(148)	(99)	(43)
Impairment losses recognised	521	130	278
Other non-cash charges	99	72	247
Other cash costs	288	256	315
	1,105	809	1,056

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Provision reversals of £148 million (2018 – £99 million, 2017 – £43 million) reflected provision releases for the Combined restructuring and integration programme. Asset impairments of £521 million and other non-cash charges of £99 million principally comprised fixed asset write-downs across manufacturing and research facilities and accelerated depreciation where asset lives in R&D and manufacturing have been shortened as a result of the Major restructuring programmes. All other charges have been or will be settled in cash and include the termination of leases, site closure costs, consultancy and project management costs.

The analysis of Major restructuring charges by programme was as follows:

			2019
	Cash £m	Non-cash £m	Total £m
2018 major restructuring programme (including Tesaro)	227	572	799
Consumer Healthcare Joint Venture integration programme	248	4	252
Combined restructuring and integration programme	10	44	54
	485	620	1,105
The analysis of Major restructuring charges by income statement line was as follow	2019		
		2018	2017
Cost of sales	£m	£m	£m
Cost of sales Selling, general and administration			
	£m 658	£m 443	£m 545
Selling, general and administration	£m 658 332	£m 443 315	£m 545 248

11. Finance income

	2019 £m	2018 £m	2017 £m
Years to 31 December 2019 and 31 December 2018 under IFRS 9			
Finance income arising from:			
Financial assets measured at amortised cost	69	73	
Financial assets measured at fair value through profit or loss	10	1	
Net gains arising from the forward element of forward contracts in net investment hedge relationships	19	7	
Year to 31 December 2017 under IAS 39			
Interest income arising from:			
Cash and cash equivalents			60
Available-for-sale investments			2
Loans and receivables			1
Fair value adjustments on derivatives at fair value through profit or loss			2
	98	81	65

Finance income arising from financial assets measured at amortised cost in 2019 and 2018 includes interest income arising from assets which would have been classified as available-for-sale investments and loans and receivables in 2017 under IAS 39. This also includes interest income arising from certain cash and cash equivalents. Finance income arising from financial assets measured at fair value through profit or loss in 2019 and 2018 includes interest income arising from other cash and cash equivalents.

Net gains arising from hedge ineffectiveness on net investment hedges were recorded in 'Fair value adjustments on derivatives at fair value through profit or loss' in 2017. All derivatives accounted for at fair value through profit or loss other than designated and effective hedging instruments (see Note 43, 'Financial instruments and related disclosures') are classified as held-for-trading financial instruments.

12. Finance expense

	2019 £m	2018 £m	2017 £m
Finance expense arising on:			
Financial liabilities at amortised cost	(832)	(677)	(698)
Derivatives at fair value through profit or loss	(6)	(38)	(22)
Net losses arising from:			
Financial instruments mandatorily measured at fair value through profit or loss	(1)	3	(4)
Reclassification of hedges from other comprehensive income	(2)	(2)	_
Unwinding of discounts on provisions	(8)	(15)	(16)
Finance expense arising on lease liabilities	(39)	(2)	(1)
Other finance expense	(24)	(67)	7
	(912)	(798)	(734)

All derivatives accounted for at fair value through profit or loss, other than designated and effective hedging instruments (see Note 43, 'Financial instruments and related disclosures'), are classified as held-for-trading financial instruments. Finance expense arising on derivatives at fair value through profit or loss relates to swap interest expense. The prior year figures in finance expense arising on lease liabilities related to interest arising on finance leases under the previous leasing standard, IAS 17, which was originally reported in 'Other finance expense'. In 2018, other finance expense included a £39 million charge for interest relating to historical income tax settlements.

13. Associates and joint ventures

The Group's share of after-tax profits and losses of associates and joint ventures is set out below:

	2019	2018	2017
	£m	£m	£m
Share of after-tax profits of associates	85	28	16
Share of after-tax (losses)/profits of joint ventures	(11)	3	(3)
	74	31	13

At 31 December 2019, the Group held one significant associate, Innoviva, Inc.

Summarised income statement information in respect of Innoviva is set out below. The Group's 2019 share of after-tax profits of associates and other comprehensive income includes a profit of £79 million and other comprehensive income of £nil in respect of Innoviva.

The results of Innoviva included in the summarised income statement information below represent the estimated earnings of Innoviva in the relevant periods, based on publicly available information at the balance sheet date. Innoviva's turnover arises from royalty income from GSK in relation to *Relvar/Breo Ellipta*, *Anoro Ellipta* and *Trelegy Ellipta* sales.

	2019	2018	2017
	£m	£m	£m
Turnover	193	183	165
Profit after taxation	116	134	103
Other comprehensive income	_	_	_
Total comprehensive income	116	134	103

The estimated results of Innoviva for 2018 exclude a deferred tax credit of £163 million which was not announced by Innoviva until after the Group finalised its results for 2018. Accordingly, GSK's share of this credit of £51 million has been recognised in the share of after-tax profits of associates in 2019.

Aggregated financial information in respect of GSK's share of other associated undertakings and joint ventures is set out below:

	2019	2018	2017
	£m	£m	£m
Share of turnover	32	242	252
Share of after-tax (losses)/profits	(5)	(2)	(5)
Share of other comprehensive income	1	_	_
Share of total comprehensive (expense)/income	(5)	(2)	(5)

The Group's sales to associates and joint ventures were £11 million in 2019 (2018 – £43 million; 2017 – £41 million).

Investor information

Notes to the financial statements continued

14. Taxation

The Group's tax charge is the sum of the total current and deferred tax expense.

	2019	2018	2017
Taxation charge based on profits for the year	£m	£m	£m
UK current year charge	149	234	199
Rest of World current year charge	1,407	1,426	1,928
Credit in respect of prior periods	(420)	(492)	(508)
Current taxation	1,136	1,168	1,619
Deferred taxation	(183)	(414)	(263)
	953	754	1,356

In 2019, GSK made payments of £163 million in UK corporation tax to HMRC. These amounts are for UK corporation tax only, and do not include the various other business taxes borne in the UK by GSK each year.

The deferred tax credit in 2019 reflected the origination of current year expenses where offset against taxable profits in future periods is probable. In 2018, this also included an uplift in the tax carrying value of certain Consumer Healthcare brands as a result of the acquisition of Novartis' interest in the former Consumer Healthcare Joint Venture.

The deferred tax credit in 2017 reflected the revaluation of existing deferred tax liabilities to reflect a lower Swiss tax rate applicable following Swiss tax reform and an increase in deferred tax assets related to intra-Group profit on inventory. The impact of these items was partly offset by the revaluation of existing deferred tax assets to reflect the lower US tax rate applicable following the enactment of US tax reform.

The following table reconciles the tax charge calculated at the UK statutory rate on the Group profit before tax with the actual tax charge for the year.

			2018		2017	
Reconciliation of taxation on Group profits	2019	2019	(revised) £m	2018	(revised)	2017
	£m	%		%	£m	%
Profit before tax	6,221		4,800		3,525	
UK statutory rate of taxation	1,182	19.0	912	19.0	679	19.3
Differences in overseas taxation rates	667	10.7	635	13.2	586	16.6
Benefit of intellectual property incentives	(691)	(11.1)	(482)	(10.0)	(410)	(11.6)
R&D credits	(119)	(1.9)	(73)	(1.5)	(75)	(2.1)
Fair value remeasurement of non-taxable put options	(45)	(0.7)	221	4.6	227	6.5
Tax losses where no benefit is recognised	15	0.2	24	0.5	28	0.8
Permanent differences on disposals and acquisitions	68	1.1	(7)	(0.1)	4	0.1
Other permanent differences	119	1.9	53	1.1	162	4.6
Re-assessments of prior year estimates	(364)	(5.9)	(436)	(9.1)	(475)	(13.5)
Changes in tax rates	121	2.0	(93)	(1.9)	629	17.8
Tax charge/tax rate	953	15.3	754	15.7	1,356	38.5

GSK has a substantial business presence in many countries around the world. The impact of differences in overseas taxation rates arose from profits being earned in countries with tax rates higher than the UK statutory rate, the most significant of which in 2019 were the US, Belgium, India and Japan. The adverse impact was partly offset by the increased benefit of intellectual property incentives such as the UK Patent Box and Belgian Patent Income Deduction regimes. Such regimes provide a reduced rate of corporate income tax on profits earned from qualifying patents. We claim these incentives in the manner intended by the relevant statutory or regulatory framework.

In 2019, 'Changes in tax rates' included items of expense where tax relief will only be available in future periods at lower rates due to the reduction in statutory tax rates in the UK and Belgium to 17% and 25% respectively. The impact of US and Swiss tax reform has been incorporated into the 'Changes in tax rates' category for the years 2017 and 2018. The respective values are £595 million debit and £125 million credit.

The Group's 2019 tax rate of 15.3% has been influenced by the reassessment of open issues with tax authorities in various jurisdictions and fair value accounting movements on the Group's put option liabilities to ViiV Healthcare and on hedges against shares in Hindustan Unilever Limited to be received on disposal of Horlicks and other Consumer Healthcare brands.

Future tax charges, and therefore our effective tax rate, may be affected by factors such as acquisitions, disposals, restructurings, the location of research and development activity, tax regime reforms and resolution of open matters as we continue to bring our tax affairs up to date around the world.

14. Taxation continued

Tax on items charged to equity and statement of comprehensive income	2019 £m	2018 £m	2017 £m
Current taxation			
Share-based payments	1	_	_
Defined benefit plans	16	(2)	26
	17	(2)	26
Deferred taxation			
Share-based payments	18	2	(4)
Defined benefit plans	173	(144)	(247)
Fair value movements on cash flow hedges	16	(2)	_
Fair value movements on equity investments	(95)	10	29
	112	(134)	(222)
Total credit/(charge) to equity and statement of comprehensive income	129	(136)	(196)

All of the above items have been charged to the statement of comprehensive income except for tax on share-based payments.

Issues relating to taxation

The integrated nature of the Group's worldwide operations involves significant investment in research and strategic manufacture at a limited number of locations, with consequential cross-border supply routes into numerous end-markets. In line with current OECD guidelines we base our transfer pricing policy on the 'arm's length' principle. However, different tax authorities may seek to attribute further profit to activities being undertaken in their jurisdiction potentially resulting in double taxation. The Group also has open items in several jurisdictions concerning such matters as the deductibility of particular expenses and the tax treatment of certain business transactions. GSK applies a risk based approach to determine the transactions most likely to be subject to challenge, assuming the relevant tax authority will review and have full knowledge of all the relevant information, and the probability that the Group would be able to obtain compensatory adjustments under international tax treaties.

The calculation of the Group's total tax charge therefore necessarily involves a degree of estimation and judgement in respect of certain items where the tax treatment cannot be finally determined until resolution has been reached with the relevant tax authority or, as appropriate, through a formal legal process. At 31 December 2019 the Group had recognised provisions of £933 million in respect of such uncertain tax positions (2018 – £1,082 million). The decrease in recognised provisions during 2019 was driven by the reassessment of estimates and the utilisation of provisions for uncertain tax positions following the settlement of a number of open issues with tax authorities in various jurisdictions. Whilst the ultimate liability for such matters may vary from the amounts provided and is dependent upon the outcome of agreements with the relevant tax authorities, or litigation where appropriate, the Group continues to believe that it has made appropriate provision for periods which are open and not yet agreed by the tax authorities.

A provision for deferred tax liabilities of £198 million as at 31 December 2019 (2018 – £185 million) has been made in respect of taxation that would be payable on the remittance of profits by certain overseas subsidiaries. Whilst the aggregate amount of unremitted profits at the balance sheet date was approximately £19 billion (2018 – £18 billion), the majority of these unremitted profits would not be subject to tax (including withholding tax) on repatriation, as UK legislation relating to company distributions provides for exemption from tax for most overseas profits, subject to certain exceptions. Deferred tax is not provided on temporary differences of £326 million (2018 – £231 million) arising on unremitted profits as management has the ability to control any future reversal and does not consider such a reversal to be probable.

14. Taxation continued

Movement in deferred tax assets and liabilities

					Pensions &		Share	Other	
	Accelerated capital	Intangible	Contingent	Intra-Group	other post employment	Tax	option and award	net temporary	
	allowances	assets	consideration	profit	benefits	losses	schemes	differences	Total
	£m	£m	£m	£m	£m	£m	£m	£m	£m
At 1 January 2018	(317)	(1,320)	868	1,017	760	261	74	1,057	2,400
Exchange adjustments	(6)	(4)	-	43	38	2	2	9	84
Credit/(charge) to income statement	(12)	365	(34)	(31)	33	183	(7)	(101)	396
Credit/(charge) to statement of									
comprehensive income and equity	_	-	-	-	(144)	-	2	8	(134)
Reclassification on disposal		_	_	_	7	1	_	(23)	(15)
At 31 December 2018	(335)	(959)	834	1,029	694	447	71	950	2,731
Implementation of IFRS 16	40	-	-	-	-	-	-	-	40
At 31 December 2018, as adjusted	(295)	(959)	834	1,029	694	447	71	950	2,771
Exchange adjustments	17	88	-	(8)	(40)	(8)	(1)	55	103
Credit/(charge) to income statement	35	(204)	(77)	59	9	225	(7)	143	183
Credit/(charge) to statement of									
comprehensive income and equity	_	-	_	-	186	-	18	(92)	112
Acquisitions and disposals	1	(3,117)	_	40	15	278	-	(60)	(2,843)
R&D credits utilisation	_	-	_	_	-	-	-	(40)	(40)
At 31 December 2019	(242)	(4,192)	757	1,120	864	942	81	956	286

Deferred tax liabilities provided in relation to intangible assets predominately relate to temporary differences arising on assets and liabilities acquired as part of historic business combinations. Acquisitions and disposals in 2019 included deferred tax liabilities of £2,591 million related to the Pfizer consumer healthcare business acquisition and £252 million related to the Tesaro acquisition.

The Group continues to recognise deferred tax assets on future obligations in respect of contingent consideration amounts payable to minority shareholders. These payments are tax deductible at the point in time at which payment is made.

A deferred tax asset is recognised on intra-Group profits arising on inter-company inventory which are eliminated within the consolidated accounts. As intra-Group profits are not eliminated from the individual entities' tax returns a temporary difference arises that will reverse at the point in time inventory is sold externally.

The deferred tax asset recognised on tax losses of £942 million (2018 – £447 million) relates to trading losses. Included in this amount are deferred tax assets of £237 million in relation to losses which are recognised on the basis that sufficient future taxable profits to utilise the losses are forecast in the entities to which the losses relate. Other net temporary differences included accrued expenses for which a tax deduction was only available on a paid basis, such as for pensions.

Deferred tax asset and liabilities are recognised on the balance sheet as follows:

	2019	2018
	£m	£m
Deferred tax assets	4,096	3,887
Deferred tax liabilities	(3,810)	(1,156)
	286	2,731

Deferred tax assets are recognised on US foreign tax credits only where it is probable that future taxable profits will be available. The net amount of foreign tax credits on which deferred tax has not been provided was £93 million (2018 – £114 million).

		2019		2018
		Unrecognised deferred tax		Unrecognised deferred tax
	Tax losses	asset	Tax losses	asset
Unrecognised tax losses	£m	£m	£m	£m
Trading losses expiring:				
Within 10 years	556	117	678	148
More than 10 years	838	108	957	93
Available indefinitely	159	27	89	15
At 31 December	1,553	252	1,724	256
Capital losses expiring:				
Available indefinitely	2,148	355	2,042	399
At 31 December	2,148	355	2,042	399

15. Earnings per share

	2019	2018	2017
	pence	pence	pence
Basic earnings per share	93.9	73.7	31.4
Diluted earnings per share	92.6	72.9	31.0

Basic earnings per share has been calculated by dividing the profit attributable to shareholders by the weighted average number of shares in issue during the period after deducting shares held by the ESOP Trusts and Treasury shares. The trustees have waived their rights to dividends on the shares held by the ESOP Trusts.

Diluted earnings per share has been calculated after adjusting the weighted average number of shares used in the basic calculation to assume the conversion of all potentially dilutive shares. A potentially dilutive share forms part of the employee share schemes where its exercise price is below the average market price of GSK shares during the period and any performance conditions attaching to the scheme have been met at the balance sheet date.

The numbers of shares used in calculating basic and diluted earnings per share are reconciled below.

Weighted average number of shares in issue	2019 millions	2018 millions	2017 millions
Basic	4,947	4,914	4,886
Dilution for share options and awards	69	57	55
Diluted	5,016	4,971	4,941

16. Dividends

			2019			2018			2017
	Paid/payable	Dividend per share (pence)	Total dividend £m	Paid	Dividend per share (pence)	Total dividend £m	Paid	Dividend per share (pence)	Total dividend £m
First interim	11 July 2019	19	940	12 July 2018	19	934	13 July 2017	19	928
Second interim	10 October 2019	19	941	11 October 2018	19	934	12 October 2017	19	929
Third interim	9 January 2020	19	941	10 January 2019	19	935	11 January 2018	19	929
Fourth interim	9 April 2020	23	1,139	11 April 2019	23	1,137	12 April 2018	23	1,130
Total		80	3,961		80	3,940		80	3,916

Under IFRS, interim dividends are only recognised in the financial statements when paid and not when declared. GSK normally pays a dividend two quarters after the quarter to which it relates and one quarter after it is declared. The 2019 financial statements recognise those dividends paid in 2019, namely the third and fourth interim dividends for 2018, and the first and second interim dividends for 2019.

The amounts recognised in each year were as follows:

	2019	2018	2017
	£m	£m	£m
Dividends to shareholders	3.953	3.927	3.906

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17. Property, plant and equipment

	Land and buildings	Plant, equipment and vehicles	Assets in construction	Total
0.1.11	£m	£m	£m	£m
Cost at 1 January 2018	7,467	11,751	2,501	21,719
Exchange adjustments	150	187	25	362
Other additions	33	190	1,135	1,358
Capitalised borrowing costs	_	_	21	21
Disposals and write-offs	(90)	(440)	(53)	(583)
Reclassifications	403	1,016	(1,486)	(67)
Transfer to assets held for sale	(152)	(167)	(3)	(322)
Cost at 31 December 2018	7,811	12,537	2,140	22,488
Implementation of IFRS 16	(64)	(106)	-	(170)
At 31 December 2018, as adjusted	7,747	12,431	2,140	22,318
Exchange adjustments	(254)	(381)	(70)	(705)
Additions through business combinations	149	177	34	360
Other additions	42	154	1,084	1,280
Capitalised borrowing costs	_	_	25	25
Disposals and write-offs	(34)	(528)	(11)	(573)
Reclassifications	243	919	(1,231)	(69)
Transfer to assets held for sale	(261)	(711)	(65)	(1,037)
Cost at 31 December 2019	7,632	12,061	1,906	21,599
Depreciation at 1 January 2018	(3,036)	(7,260)	_	(10,296)
Exchange adjustments	(61)	(111)	-	(172)
Charge for the year	(268)	(686)	_	(954)
Disposals and write-offs	77	401	_	478
Transfer to assets held for sale	55	122	_	177
Depreciation at 31 December 2018	(3,233)	(7,534)	_	(10,767)
Implementation of IFRS 16	30	42	_	72
At 31 December 2018, as adjusted	(3,203)	(7,492)	_	(10,695)
Exchange adjustments	74	196	_	270
Charge for the year	(265)	(752)	_	(1,017)
Disposals and write-offs	19	380	_	399
Transfer to assets held for sale	159	477	_	636
Depreciation at 31 December 2019	(3,216)	(7,191)	-	(10,407)
Impairment at 1 January 2018	(161)	(359)	(43)	(563)
Exchange adjustments	(8)	(4)	(1)	(13)
Disposals and write-offs	10	59	22	91
Impairment losses	(16)	(143)	(46)	(205)
•	1	6		(203)
Reversal of impairments Transfer to assets held for sale		20	-	20
Impairment at 31 December 2018	(174)		(60)	
•	(174)	(421)	(68)	(663)
Implementation of IFRS 16	(474)	(404)	(00)	(000)
At 31 December 2018, as adjusted	(174)	(421)	(68)	(663)
Exchange adjustments	13	11	6	30
Disposals and write-offs	2	77	36	115
Impairment losses	(312)	(329)	(38)	(679)
Reversal of impairments	2	8	_	10
Transfer to assets held for sale	90	209	(00)	343
Impairment at 31 December 2019	(379)	(445)	(20)	(844)
Total depreciation and impairment at 31 December 2018	(3,407)	(7,955)	(68)	(11,430)
Total depreciation and impairment at 31 December 2019	(3,595)	(7,636)	(20)	(11,251)
Net book value at 1 January 2018	4,270	4,132	2,458	10,860
Net book value at 31 December 2018	4,404	4,582	2,072	11,058
Net book value at 31 December 2019	4,037	4,425	1,886	10,348

17. Property, plant and equipment continued

The weighted average interest rate for capitalised borrowing costs in the year was 3% (2018 – 3%). Disposals and write-offs in the year included a number of assets with nil net book value that are no longer in use in the business.

The impairment losses principally arose from decisions to rationalise facilities and are calculated based on either fair value less costs of disposal or value in use. The fair value less costs of disposal valuation methodology uses significant inputs which are not based on observable market data, and therefore this valuation technique is classified as level 3 of the fair value hierarchy. These calculations determine the net present value of the projected risk-adjusted, post-tax cash flows of the relevant asset or cash generating unit, applying a discount rate of the Group post-tax weighted average cost of capital (WACC) of 7%, adjusted where appropriate for specific segment, country and currency risk. For value in use calculations, the post-tax cash flows do not include the impact of future uncommitted restructuring plans or improvements. Where an impairment is indicated and a pre-tax cash flow calculation is expected to give a materially different result, the test would be reperformed using pre-tax cash flows and a pre-tax discount rate. The Group WACC is equivalent to a pre-tax discount rate of approximately 9%. The net impairment losses have been charged to cost of sales: £624 million (2018 – £142 million), R&D: £1 million (2018 – £9 million) and SG&A: £44 million (2018 – £54 million), and included £502 million (2018 – £138 million) arising from the Major restructuring programmes.

Reversals of impairment arose from subsequent reviews of the impaired assets where the conditions which gave rise to the original impairments were deemed no longer to apply. All of the reversals have been credited to cost of sales.

During 2019, £69 million (2018 – £67 million) of computer software was reclassified from assets in construction to intangible assets on becoming ready for use.

18. Right of use assets

	Land and buildings £m	Plant and equipment £m	Vehicles £m	Total £m
Net book value at 1 January 2019	907	27	137	1,071
Exchange adjustments	(28)	(2)	(6)	(36)
Additions through business combinations	66	11	2	79
Other additions	60	1	71	132
Depreciation	(145)	(8)	(61)	(214)
Disposals	(37)	(20)	(7)	(64)
Impairments	(2)	_	-	(2)
Reclassifications	_	13	(13)	-
Net book value at 31 December 2019	821	22	123	966

The total cash outflow for leases amounted to £214 million. There were no significant lease commitments for leases not commenced at year-end.

An analysis of lease liabilities is set out in Note 29, 'Net debt'.

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19. Goodwill

	2019 £m	2018 £m
Cost at 1 January	5,789	5,734
Exchange adjustments	(277)	199
Additions through business combinations (Note 40)	5,023	-
Transfer from/(to) assets held for sale	27	(144)
Cost at 31 December	10,562	5,789
Net book value at 1 January	5,789	5,734
Net book value at 31 December	10,562	5,789
Goodwill is allocated to the Group's segments as follows:		
	2019 £m	2018 £m
Pharmaceuticals	4,316	3,273
Vaccines	1,280	1,342
Consumer Healthcare	4,966	1,174
Net book value at 31 December	10,562	5,789

The recoverable amounts of the cash generating units are assessed using a fair value less costs of disposal model. Fair value less costs of disposal is calculated using a discounted cash flow approach, with a post-tax discount rate applied to the projected risk-adjusted post-tax cash flows and terminal value.

The discount rate used is based on the Group WACC of 7%, as most cash generating units have integrated operations across large parts of the Group. The discount rate is adjusted where appropriate for specific segment, country and currency risks. The valuation methodology uses significant inputs which are not based on observable market data, therefore this valuation technique is classified as level 3 in the fair value hierarchy.

Details relating to the discounted cash flow models used in the impairment tests of the Pharmaceuticals, Vaccines and Consumer Healthcare cash generating units are as follows:

Valuation basis	Fair value less costs of disposal						
Key assumptions	Sales growth rates Profit margins Terminal growth rate Discount rate Taxation rate						
Determination of assumptions	Margins reflect past experience, ac	nagement's estimate of future long-term a //ACC, adjusted where appropriate.					
Period of specific projected cash flows	Five years						
Terminal growth rate and discount rate		Terminal growth rate	Discount rate				
	Pharmaceuticals Vaccines Consumer Healthcare	1% p.a. 1% p.a. 2% p.a.	7.5% 7.5% 6%				

The terminal growth rates do not exceed the long-term projected growth rates for the relevant markets, reflect the impact of future generic competition and take account of new product launches.

Goodwill is monitored for impairment at the segmental level. In each case the valuations indicated sufficient headroom such that a reasonably possible change to key assumptions is unlikely to result in an impairment of the related goodwill.

The Pharmaceuticals cash generating unit comprises a collection of smaller cash generating units including assets with indefinite lives with a carrying value of £nil (2018 - £236 million). The Consumer Healthcare cash generating unit also comprises a collection of smaller cash generating units including brands with indefinite lives with a carrying value of £19.6 billion (2018 – £8.5 billion).

Details of indefinite life brands are given in Note 20, 'Other intangible assets'.

20. Other intangible assets

	Computer software £m	Licences, patents, amortised brands etc. £m	Indefinite life brands £m	Total £m
Cost at 1 January 2018	2,174	15,764	8,993	26,931
Exchange adjustments	32	264	63	359
Capitalised development costs	_	203	_	203
Capitalised borrowing costs	1	_	_	1
Other additions	173	154	_	327
Disposals and asset write-offs	(80)	(129)	_	(209)
Transfer to assets held for sale	(2)	(90)	_	(92)
Reclassifications	67	_	_	67
Cost at 31 December 2018	2,365	16,166	9,056	27,587
Exchange adjustments	(37)	(418)	(1,037)	(1,492)
Capitalised development costs	_	239	-	239
Capitalised borrowing costs	1	_	-	1
Additions through business combinations	31	3,091	12,357	15,479
Other additions	197	465	_	662
Disposals and asset write-offs	(235)	(7)	_	(242)
Transfer to assets held for sale	(7)	(62)	(227)	(296)
Reclassifications	82	242	(255)	69
Cost at 31 December 2019	2,397	19,716	19,894	42,007
Amortisation at 1 January 2018	(1,111)	(5,787)	-	(6,898)
Exchange adjustments	(24)	(107)	-	(131)
Charge for the year	(240)	(662)	-	(902)
Disposals and asset write-offs	67	124	-	191
Transfer to assets held for sale	1	19	-	20
Amortisation at 31 December 2018	(1,307)	(6,413)	-	(7,720)
Exchange adjustments	19	123	-	142
Charge for the year	(233)	(870)	-	(1,103)
Disposals and asset write-offs	215	4	_	219
Transfer to assets held for sale	4	42	_	46
Amortisation at 31 December 2019	(1,302)	(7,114)	_	(8,416)
Impairment at 1 January 2018	(9)	(2,207)	(255)	(2,471)
Exchange adjustments	_	(89)	-	(89)
Impairment losses	(17)	(51)	(69)	(137)
Reversal of impairments	_	3	-	3
Disposals and asset write-offs	14	4	_	18
Transfer to assets held for sale		11	_	11
Impairment at 31 December 2018	(12)	(2,329)	(324)	(2,665)
Exchange adjustments	3	70		73
Impairment losses	(49)	(84)	(3)	(136)
Reversal of impairments	_	10	-	10
Disposals and asset write-offs	19	3	-	22
Transfer to assets held for sale	2	5	53	60
Impairment at 31 December 2019	(37)	(2,325)	(274)	(2,636)
Total amortisation and impairment at 31 December 2018	(1,319)	(8,742)	(324)	(10,385)
Total amortisation and impairment at 31 December 2019	(1,339)	(9,439)	(274)	(11,052)
Net book value at 1 January 2018	1,054	7,770	8,738	17,562
Net book value at 31 December 2018	1,046	7,424	8,732	17,202
Net book value at 31 December 2019	1,058	10,277	19,620	30,955

The weighted average interest rate for capitalised borrowing costs in the year was 3% (2018 – 3%).

The net book value of computer software included £560 million (2018 – £578 million) of internally generated costs.

The carrying value at 31 December 2019 of intangible assets, for which impairments have been charged or reversed in the year, following those impairments or reversals, was £175 million (2018 – £73 million).

The patent expiry dates of the Group's most significant assets, where relevant, are set out on pages 272 and 273.

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20. Other intangible assets continued

Amortisation and impairment losses, net of reversals, have been charged in the income statement as follows:

	Amortisation		Net imp	Net impairment losses	
	2019 £m	2018 £m	2019 £m	2018 £m	
Cost of sales	781	593	34	69	
Selling, general and administration	163	178	43	19	
Research and development	159	131	49	46	
	1,103	902	126	134	

Licences, patents, amortised brands etc. includes a large number of acquired licences, patents, know-how agreements and marketing rights, which are either marketed or in use, or still in development. Note 40, 'Acquisitions and disposals' gives details of additions through business combinations in the year. The book values of the largest individual items are as follows:

	2019 £m	2018 £m
Zejula	2,878	_
Meningitis portfolio	2,139	2,363
Dolutegravir	1,280	1,319
Benlysta	834	905
BMS	286	277
Merck Assets	264	_
Fluarix/FluLaval	237	274
Stiefel trade name	204	_
Others	2,155	2,286
	10,277	7,424

The Meningitis portfolio includes Menveo, Bexsero, Men ABCWY and Menjugate. The Stiefel trade name has been moved into licences, patents, amortised brands etc. following the decision to start amortisation during 2019.

Indefinite life brands comprise a portfolio of Consumer Healthcare products primarily acquired with the acquisitions of Sterling Winthrop, Inc. in 1994, Block Drug Company, Inc. in 2001, CNS, Inc. in 2006, the Novartis consumer healthcare business in 2015 and the Pfizer consumer healthcare business in 2019. The book values of the major brands are as follows:

	2019	2018
Advil	£m 3,408	£m_
Voltaren	2,725	2,735
Centrum	1,808	2,700
Caltrate	1,648	_
Otrivin	1,385	1,385
Preparation H	1,171	
Robitussin	1,138	_
Nexium	682	_
Fenistil	598	651
Chapstick	523	_
Emergen-C	447	_
Theraflu	438	449
Panadol	397	388
Lamisil	291	293
Sensodyne	270	265
Breathe Right	251	262
Stiefel trade name	_	236
Others	2,440	2,068
	19,620	8,732

20. Other intangible assets continued

Each of these brands is considered to have an indefinite life, given the strength and durability of the brand and the level of marketing support. The brands are in relatively similar stable and profitable market sectors, with similar risk profiles, and their size, diversification and market shares mean that the risk of market-related factors causing a reduction in the lives of the brands is considered to be relatively low. The Group is not aware of any material legal, regulatory, contractual, competitive, economic or other factors which could limit their useful lives. Accordingly, they are not amortised.

Each brand is tested annually for impairment and other amortised intangible assets are tested when indicators of impairment arise. This testing applies a fair value less costs of disposal methodology, generally using post-tax cash flow forecasts with a terminal value calculation and a discount rate equal to the Group post-tax WACC of 7%, adjusted where appropriate for specific segment, country and currency risks. This valuation methodology uses significant inputs which are not based on observable market data, and therefore this valuation technique is classified as level 3 of the fair value hierarchy. The main assumptions include future sales price and volume growth, product contribution, the future expenditure required to maintain the product's marketability and registration in the relevant jurisdictions and exchange rates. These assumptions are based on past experience and are reviewed as part of management's budgeting and strategic planning cycle for changes in market conditions and sales erosion through competition. The terminal growth rates applied of between -2% and 3% are management's estimates of future long-term average growth rates of the relevant markets. In each case the valuations indicate sufficient headroom such that a reasonably possible change to key assumptions is unlikely to result in an impairment of these intangible assets.

21. Investments in associates and joint ventures

	Joint ventures £m	Associates £m	2019 Total £m	Joint ventures £m	Associates £m	2018 Total £m
At 1 January	19	217	236	13	170	183
Exchange adjustments	(1)	(9)	(10)	1	11	12
Additions	16	11	27	1	9	10
Disposals	(1)	-	(1)	_	_	_
Distributions received	-	(7)	(7)	_	(40)	(40)
Other movements	(7)	2	(5)	1	39	40
Profit/(loss) after tax recognised in the consolidated income statement	(11)	85	74	3	28	31
At 31 December	15	299	314	19	217	236

The Group held one significant associate at 31 December 2019, Innoviva, Inc. At 31 December 2019, the Group owned 32 million shares or 31.6% of Innoviva, which is a biopharmaceutical company listed on NASDAQ. Innoviva partnered with GSK in the development of the long acting beta agonist, vilanterol, and currently receives royalty income from sales of products that contain this component, namely *Relvar/Breo Ellipta* and *Anoro Ellipta*. It also has a 15% economic interest in royalties paid by GSK on sales of *Trelegy Ellipta*. The remaining 85% of the economic interest in these royalties is held by Theravance Biopharma Inc., in which the Group holds 17% of the common stock. The investment in Innoviva had a market value of £343 million at 31 December 2019 (2018 – £440 million).

Summarised balance sheet information, based on information published post the balance sheet date, in respect of Innoviva is set out below:

	At 31 December 2019 £m	At 31 December 2018 £m
Non-current assets	222	275
Current assets	326	157
Current liabilities	(4)	(4)
Non-current liabilities	(286)	(302)
Net assets	258	126
The carrying value of the Group's investment in Innoviva is analysed as follows:		
	2019 £m	2018 £m
Interest in net assets of associate	82	40
Goodwill	88	91
Fair value and other adjustments	91	58
Carrying value at 31 December	261	189

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22. Other investments

	Investments designated as measured at FVTOCI £m	Investments measured at FVTPL £m	2019 £m	Investments designated as measured at FVTOCI	Investments measured at FVTPL £m	2018 £m
At 1 January	1,250	72	1,322	869	49	918
Additions	274	3	277	363	9	372
Net fair value movements through Other comprehensive income	314	-	314	166	-	166
Net fair value movements through profit or loss	_	(14)	(14)	_	20	20
Disposals and settlements	(57)	(5)	(62)	(89)	(6)	(95)
Transfers to Assets held for sale	-	-	-	(59)	-	(59)
At 31 December	1,781	56	1,837	1,250	72	1,322

Other investments comprise non-current equity investments which are recorded at fair value at each balance sheet date. For investments traded in an active market, the fair value is determined by reference to the relevant stock exchange quoted bid price. For other investments, the fair value is estimated by management with reference to relevant available information, including the current market value of similar instruments, recent financing rounds and discounted cash flows of the underlying net assets. Net fair value movements include the impact of exchange (losses of £66 million through Other comprehensive income and £2 million through profit or loss) (2018 – gains of £48 million and £4 million respectively). Other investments include listed investments of £1,128 million (2018 – £656 million).

GSK has elected to designate the majority of its equity investments as measured at fair value through other comprehensive income (FVTOCI). The most significant of these investments held at 31 December 2019 were in 23andMe in which the Group holds 14.5% of the common stock, Progyny, Inc. in which the Group holds 12.5%, Theravance Biopharma, Inc. in which the Group holds 17.0% and Lyell Immunopharma, Inc in which the Group holds 15.0%. These investments had a fair value at 31 December 2019 of £227 million (2018 – £229 million), £213 million (2018 – £21 million), £189 million (2018 – £194 million) and £155 million, respectively. No other investment is individually material. The other investments include equity stakes in companies with which GSK has research collaborations and in companies which provide access to biotechnology developments of potential interest.

On disposal of equity investments measured at FVTOCI, the accumulated fair value movements are reclassified from the fair value reserve to retained earnings. Investments with a fair value of £57 million (2018 – £148 million) were disposed of during the year. The cumulative gain on these investments after tax was £4 million (2018 – £56 million).

Certain other investments, such as investments in funds with limited lives, are measured at fair value through profit or loss (FVTPL). Investments with a fair value of £5 million were disposed of during the year.

Cumulative impairments on those Other investments designated as measured at FVTOCI under IFRS 9 were transferred from retained earnings to the fair value reserve on 1 January 2018 on adoption of IFRS 9.

23. Other non-current assets

	2019 £m	2018 £m
Amounts receivable under insurance contracts	743	675
Pension schemes in surplus	127	760
Other receivables	150	141
	1,020	1,576

Amounts receivable under insurance contacts are held at fair value through profit or loss.

Within the other receivables of £150 million (2018 – £141 million), £88 million (2018 – £89 million) is classified as financial assets of which £44 million (2018 – £41 million) is classified as fair value through profit or loss. On the remaining balance of £44 million (2018 – £48 million), the expected credit loss allowance was immaterial at 31 December 2019 and 2018.

24. Inventories

	2019 £m	2018 £m
Raw materials and consumables	1,195	1,122
Work in progress	2,505	2,286
Finished goods	2,247	2,068
	5,947	5,476

25. Trade and other receivables

	2019 £m	2018 £m
Trade receivables, net of loss allowance	5,487	5,176
Accrued income	7	9
Other prepayments	316	330
Interest receivable	3	4
Employee loans and advances	13	14
Other receivables	1,376	890
	7,202	6,423

Trade receivables included £nil (2018 - £15 million) due from associates and joint ventures. Other receivables included £nil (2018 - £nil) due from associates and joint ventures.

Less elleviones	2019	2018
Loss allowance	£m	£m
At 1 January	128	140
Implementation of IFRS 9	-	15
At 1 January, as adjusted	128	155
Exchange adjustments	(3)	_
Charge for the year	16	7
Subsequent recoveries of amounts provided for	(5)	(30)
Utilised	(6)	(4)
At 31 December	130	128

Of the total trade receivables balance, £110 million (2018 - £71 million) was considered credit impaired, against which an £11 million (2018 - £7 million) expected credit loss allowance has been applied. No amount was purchased or originated credit impaired.

Within the other receivables of £1,376 million (2018 - £890 million), £707 million (2018 - £376 million) was classified as financial assets of which £nil (2018 - £41 million) was classified as fair value through profit and loss. On the remaining balance of £707 million (2018 - £335 million), an expected credit loss allowance of £8 million (2018 - £5 million) was recognised at 31 December 2019 with no charge reported in profit or loss during the year.

For more discussion on credit risk practices, please refer to Note 43.

26. Cash and cash equivalents

	2019 £m	2018 £m
Cash at bank and in hand	795	569
Short-term deposits	3,912	3,305
	4,707	3,874

In addition, £507 million (2018 - £485 million) of cash and cash equivalents has been reported in Assets held for sale, see Note 27, 'Assets held for sale'.

Cash and cash equivalents included £0.2 billion (2018 - £0.2 billion) not available for general use due to restrictions applying in the subsidiaries where it is held. Restrictions include exchange controls and taxes on repatriation.

27. Assets held for sale

	2019 £m	2018 £m
Property, plant and equipment	80	
Right of use assets	7	-
Lease liabilities	(7)	_
Goodwill	124	144
Other intangibles	175	1
Inventory	109	50
Cash and cash equivalents	507	485
Other	(122)	(136)
	873	653

Non-current assets and disposal groups are transferred to assets held for sale when it is expected that their carrying amounts will be recovered principally through disposal and a sale is considered highly probable. They are held at the lower of carrying amount and fair value less costs to sell.

Assets held for sale primarily reflect the Thermacare disposal group, which was acquired from Pfizer as part of its consumer healthcare business and has to be sold by the Group in 2020 to meet anti-trust requirements and the disposal group representing the Horlicks and other Consumer Healthcare nutritional brands to be sold to Unilever plc.

Included within assets held for sale is inventory written down to fair value less costs to sell of £109 million (2018 – £50 million). The valuation methodology used significant inputs which were not based on observable market data and therefore this valuation is classified as level 3 in the fair value hierarchy.

An impairment of allocated goodwill of £4 million has been recognised to reflect fair value less costs to sell of a disposal group.

28. Trade and other payables

	2019 £m	2018 £m
Trade payables	4,144	3,645
Wages and salaries	1,470	1,355
Social security	164	139
ViiV Healthcare put option	1,011	1,240
Other payables	515	401
Deferred income	158	216
Customer return and rebate accruals	5,108	5,064
Other accruals	2,369	1,977
	14,939	14,037

Trade and other payables included £63 million (2018 – £64 million) due to associates and joint ventures. The Group provides limited supplier financing arrangements to certain customers. The amounts involved at 31 December 2019 were not material.

Revenue recognised in the year that was included in deferred income at 1 January 2019 was £72 million (2018 – £66 million).

Customer return and rebate accruals are provided for by the Group at the point of sale in respect of the estimated rebates, discounts or allowances payable to customers, and included $\pounds4,200$ million (2018 – $\pounds4,356$ million) in respect of US Pharmaceuticals and Vaccines, as more fully described in the Group financial review on page 72. Accruals are made at the time of sale but the actual amounts paid are based on claims made some time after the initial recognition of the sale. As the amounts are estimated, they may not fully reflect the final outcome and are subject to change dependent upon, amongst other things, the types of buying group and product sales mix. The level of accrual is reviewed and adjusted quarterly in light of historical experience of actual amounts paid and any changes in arrangements. Future events could cause the assumptions on which the accruals are based to change, which could affect the future results of the Group.

Pfizer's put option over its shareholding in ViiV Healthcare is currently exercisable. Pfizer may request an IPO of ViiV Healthcare at any time and if either GSK does not consent to such IPO or an offering is not completed within nine months, Pfizer could require GSK to acquire its shareholding. The amount of the liability for this put option, which is held on the gross redemption basis, is derived from an internal valuation of the ViiV Healthcare business, utilising both discounted forecast future cash flow and multiples-based methodologies.

The table below shows on an indicative basis the income statement and balance sheet sensitivity of the Pfizer put option to reasonably possible changes in key assumptions.

	2019
Increase/(decrease) in financial liability and loss/(gain) in Income statement	£m
10% increase in sales forecasts	119
10% decrease in sales forecasts	(118)
10 cent appreciation of US Dollar	58
10 cent depreciation of US Dollar	(49)
10 cent appreciation of Euro	37
10 cent depreciation of Euro	(31)

An explanation of the accounting for ViiV Healthcare is set out on page 51.

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29. Net debt

	Listing exchange	2019 £m	2018 £m
Current assets:			
Liquid investments		79	84
Cash and cash equivalents		4,707	3,874
Cash and cash equivalents reported in Assets held for sale		507	485
		5,293	4,443
Short-term borrowings:			
Commercial paper		(3,586)	(630
Bank loans, overdrafts and other		(434)	(290
Drawn bank facility		(1,000)	(3,500
0.625% € European Medium Term Note 2019	London Stock Exchange	-	(1,349
EURIBOR +0.20% € European Medium Term Note 2020	London Stock Exchange	(638)	-
0.000% € European Medium Term Note 2020	London Stock Exchange	(1,020)	-
Lease liabilities		(240)	(24
		(6,918)	(5,793
Long-term borrowings: EURIBOR +0.20% € European Medium Term Note 2020	Landan Staals Evahanna		(677
	London Stock Exchange	_	(677
0.000% € European Medium Term Note 2020 3.125% US\$ US Medium Term Note 2021	London Stock Exchange	(044)	(1,079)
	New York Stock Exchange	(944)	(980)
LIBOR +0.35% US\$ US Medium Term Note 2021	New York Stock Exchange	(567)	(589)
EURIBOR +0.60% € European Medium Term Note 2021	London Stock Exchange	(1,281)	_
0.000% € European Medium Term Note 2021	London Stock Exchange	(426)	(4.500)
2.850% US\$ US Medium Term Note 2022	New York Stock Exchange	(1,509)	(1,568)
2.875% US\$ US Medium Term Note 2022	New York Stock Exchange	(1,132)	(070)
2.800% US\$ US Medium Term Note 2023	New York Stock Exchange	(941)	(978)
3.375% US\$ US Medium Term Note 2023	New York Stock Exchange	(941)	(977)
0.000% € European Medium Term Note 2023	London Stock Exchange	(425)	_
3.000% US\$ US Medium Term Note 2024	New York Stock Exchange	(751)	(000)
1.375% € European Medium Term Note 2024	London Stock Exchange	(844)	(893)
4.000% € European Medium Term Note 2025	London Stock Exchange	(633)	(670)
3.625% US\$ US Medium Term Note 2025	New York Stock Exchange	(751)	(780)
1.000% € European Medium Term Note 2026	London Stock Exchange	(593)	(629)
1.250% € European Medium Term Note 2026	London Stock Exchange	(846)	(897)
3.375% £ European Medium Term Note 2027	London Stock Exchange	(594)	(593)
3.875% US\$ US Medium Term Note 2028	New York Stock Exchange	(1,319)	(1,372)
3.375% US\$ US Medium Term Note 2029	New York Stock Exchange	(746)	- (4.45)
1.375% € European Medium Term Note 2029	London Stock Exchange	(422)	(447)
1.750% € European Medium Term Note 2030	London Stock Exchange	(635)	(673)
5.250% £ European Medium Term Note 2033	London Stock Exchange	(983)	(982)
5.375% US\$ US Medium Term Note 2034	New York Stock Exchange	(375)	(390)
6.375% US\$ US Medium Term Note 2038	New York Stock Exchange	(2,061)	(2,143)
6.375% £ European Medium Term Note 2039	London Stock Exchange	(694)	(694)
5.250% £ European Medium Term Note 2042	London Stock Exchange	(987)	(986)
4.200% US\$ US Medium Term Note 2043	New York Stock Exchange	(371)	(386)
4.250% € European Medium Term Note 2045	London Stock Exchange	(789)	(788)
Other long-term borrowings		(20)	(56)
Lease liabilities		(1,010)	(44)
		(23,590)	(20,271)
Net debt		(25,215)	(21,621)

29. Net debt continued

Current assets

Liquid investments are classified as financial assets at amortised cost. At 31 December 2019, they included US Treasury Notes and other government bonds. The effective interest rate on liquid investments at 31 December 2019 was approximately 1.1% (2018 – approximately 1.0%). Liquid investment balances at 31 December 2019 earning interest at floating rates amount to £1 million (2018 – £84 million). Liquid investment balances at 31 December 2019 earning interest at fixed rates amount to £78 million (2018 – £nil).

Balances reported within cash and cash equivalents have an original maturity of three months or less. The effective interest rate on cash and cash equivalents at 31 December 2019 was approximately 1.6% (2018 – approximately 1.9%). Cash and cash equivalents at 31 December 2019 earning interest at floating and fixed rates amounted to £5,039 million and £10 million respectively (2018 – £4,094 million and £2 million) and non-interest bearing holdings amounted to £164 million (2018 – £263 million).

GSK's policy regarding the credit quality of cash and cash equivalents is set out in Note 43, 'Financial instruments and related disclosures'.

Short-term borrowings

GSK has a \$10 billion (£7.6 billion) US commercial paper programme, of which \$4.8 billion (£3.6 billion) was in issue at 31 December 2019 (2018 – \$0.8 billion (£0.6 billion)). GSK has a £1.9 billion three-year committed facility and \$2.5 billion (£1.9 billion) under a 364 day committed facility. Both the three-year committed facility and the 364 day committed facility were agreed in September 2019 and were undrawn at 31 December 2019. An additional bank facility was agreed in 2018 to support transactions and remained active at 31 December 2019. In June 2018, £3.5 billion was drawn to support the acquisition from Novartis of the remaining stake in the Consumer Healthcare Joint Venture. £2.5 billion was repaid in November 2019, leaving £1.0 billion outstanding at 31 December 2019.

The weighted average interest rate on commercial paper borrowings at 31 December 2019 was 1.8% (2018 - 2.5%).

The weighted average interest rate on current bank loans and overdrafts at 31 December 2019 was 4.6% (2018 – 12.0%). Short-term loan rates of 60% in Argentina had a disproportionate effect on the weighted average interest rate in 2018.

The average effective pre-swap interest rate of notes classified as short-term at 31 December 2019 was 0.0% (2018 – 0.8%). The continued decrease in the rate reflects the maturities of a EURIBOR +0.20% coupon note in May 2020 and a 0.0% coupon note in September 2020.

Long-term borrowings

At the year-end, GSK had long-term borrowings of £23.6 billion (2018 – £20.3 billion), of which £13.3 billion (2018 – £13.3 billion) fell due in more than five years. The average effective pre-swap interest rate of all notes in issue at 31 December 2019 was approximately 3.8% (2018 – approximately 4.4%).

Long-term borrowings repayable after five years carry interest at effective rates between 1.0% and 6.5%, with repayment dates ranging from 2025 to 2045.

Pledged assets

The Group held pledged investments in US Treasury Notes with a par value of \$50 million (£38 million), (2018 – \$50 million (£39 million)) as security against irrevocable letters of credit issued on the Group's behalf in respect of the Group's self-insurance activity. Provisions in respect of self-insurance are included within the provisions for legal and other disputes discussed in Note 31, 'Other provisions'.

Lease liabilities

The maturity analysis of discounted lease liabilities recognised on the Group balance sheet is as follows:

	2019 £m	2018 (revised) £m
Rental payments due within one year	240	24
Rental payments due between one and two years	227	18
Rental payments due between two and three years	119	12
Rental payments due between three and four years	105	6
Rental payments due between four and five years	93	3
Rental payments due after five years	466	5
Total lease liabilities	1,250	68

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30. Pensions and other post-employment benefits

Pension and other post-employment costs	2019 £m	2018 £m	2017 £m
UK pension schemes	181	246	198
US pension schemes	120	100	113
Other overseas pension schemes	185	190	218
Unfunded post-retirement healthcare schemes	74	50	87
	560	586	616
Analysed as:			
Funded defined benefit/hybrid pension schemes	300	369	335
Unfunded defined benefit pension schemes	41	43	55
Unfunded post-retirement healthcare schemes	74	50	87
Defined benefit schemes	415	462	477
Defined contribution pension schemes	145	124	139
	560	586	616

The costs of the defined benefit pension and post-retirement healthcare schemes are charged in the income statement as follows:

	2019 £m	2018 £m	2017 £m
Cost of sales	149	160	162
Selling, general and administration	195	228	238
Research and development	71	74	77
	415	462	477

GSK entities operate pension arrangements which cover the Group's material obligations to provide pensions to retired employees. These arrangements have been developed in accordance with local practices in the countries concerned. Pension benefits can be provided by state schemes; by defined contribution schemes, whereby retirement benefits are determined by the value of funds arising from contributions paid in respect of each employee; or by defined benefit schemes, whereby retirement benefits are based on employee pensionable remuneration and length of service.

Pension costs of defined benefit schemes for accounting purposes have been calculated using the projected unit method. In certain countries pension benefits are provided on an unfunded basis, some administered by trustee companies. Formal, independent, actuarial valuations of the Group's main plans are undertaken regularly, normally at least every three years.

Actuarial movements in the year are recognised through the statement of comprehensive income. Discount rates are derived from AA rated corporate bond yields except in countries where there is no deep market in corporate bonds where government bond yields are used. Discount rates are selected to reflect the term of the expected benefit payments. Projected inflation rate and pension increases are long-term predictions based on the yield gap between long-term index-linked and fixed interest Gilts. In the UK, mortality rates are determined by adjusting the SAPS S2 standard mortality tables to reflect recent scheme experience. These rates are then projected to reflect improvements in life expectancy in line with the CMI 2018 projections with a long-term rate of improvement of 1.25% per year for both males and females. In the US, mortality rates are calculated using the RP2014 white collar table adjusted to reflect recent experience. These rates are projected using MP-2017 to allow for future improvements in life expectancy.

30. Pensions and other post-employment benefits continued

The average life expectancy assumed now for an individual at the age of 60 and projected to apply in 2039 for an individual then at the age of 60 is as follows:

		UK		
	Male Years	Female Years	Male Years	Female Years
Current	27.4	29.0	27.1	28.8
Projected for 2039	28.8	30.5	28.8	30.4

The assets of funded schemes are generally held in separately administered trusts, either as specific assets or as a proportion of a general fund, or are insurance contracts. Assets are invested in different classes in order to maintain a balance between risk and return. Investments are diversified to limit the financial effect of the failure of any individual investment. The physical asset allocation strategy for three of the four UK plans has been adjusted from 55% in return-seeking assets and 45% in liability-matching assets to 45% in return-seeking assets and 55% in liability-matching assets. During 2019, a buy-in insurance contract was purchased to cover substantially all of the obligations of the other UK plan. At 31 December 2019, the value of the insurance contract was £607 million. The asset allocation of the US plans is currently set at 30% return-seeking assets and 70% liability-matching assets.

The pension plans are exposed to risk that arises because the estimated market value of the plans' assets might decline, the investment returns might reduce, or the estimated value of the plans' liabilities might increase.

In line with the agreed mix of return-seeking assets to generate future returns and liability-matching assets to better match future pension obligations, the Group has defined an overall long-term investment strategy for the plans, with investments across a broad range of assets. The main market risks within the asset and hedging portfolio are against credit risk, interest rates, long-term inflation, equities, property, currency and bank counterparty risk.

The plan liabilities are a series of future cash flows with relatively long duration. On an IAS 19 basis, these cash flows are sensitive to changes in the expected long-term inflation rate and the discount rate (AA corporate bond yield curve) where an increase in long-term inflation corresponds with an increase in the liabilities, and an increase in the discount rate corresponds with a decrease in the liabilities.

The interest rate risk and credit rate risk in the US are partially hedged. The targets are based on an accounting measure of the plan liabilities.

For the UK plans, there is an interest rate and inflation hedging strategy in place. The targets are based on an economic measure of the plan liabilities. Furthermore, the plans also currently hedge a portion of their equity exposure with a staggered maturity profile.

In the UK, the defined benefit pension schemes operated for the benefit of former Glaxo Wellcome employees and former SmithKline Beecham employees remain separate. These schemes were closed to new entrants in 2001 and subsequent UK employees are entitled to join a defined contribution scheme. In addition, the Group operates a number of post-retirement healthcare schemes, the principal one of which is in the US.

The Group has applied the following financial assumptions in assessing the defined benefit liabilities:

			UK			US		Res	t of World
	2019 % pa	2018 % pa	2017 % pa	2019 % pa	2018 % pa	2017 % pa	2019 % pa	2018 % pa	2017
	%0 pa	90 pa	90 pa	%0 pa	90 pa	90 pa	%0 pa	90 pa	% pa
Rate of increase of future earnings	2.00	2.00	2.00	4.00	4.00	4.00	2.70	2.70	2.80
Discount rate	2.00	2.90	2.50	3.20	4.20	3.60	1.10	1.80	1.60
Expected pension increases	3.00	3.20	3.20	n/a	n/a	n/a	2.10	2.10	2.20
Cash balance credit/conversion rate	n/a	n/a	n/a	2.60	3.20	2.90	0.10	0.40	0.30
Inflation rate	3.00	3.20	3.20	2.25	2.25	2.25	1.40	1.50	1.70

Sensitivity analysis detailing the effect of changes in assumptions is provided on page 213. The analysis provided reflects the assumption changes which have the most material impact on the results of the Group.

30. Pensions and other post-employment benefits continued

The amounts recorded in the income statement and statement of comprehensive income for the three years ended 31 December 2019 in relation to the defined benefit pension and post-retirement healthcare schemes were as follows:

				Pensions	Post-retirement benefits
2019	UK £m	US £m	Rest of World £m	Group £m	Group £m
Amounts charged to operating profit					
Current service cost	62	74	130	266	22
Past service cost/(credit)	49	(3)	(15)	31	-
Net interest (income)/cost	(19)	29	16	26	52
Gains from settlements	-	-	(9)	(9)	_
Expenses	7	20	_	27	-
	99	120	122	341	74
Remeasurement losses recorded in the statement of					
comprehensive income	(894)	(1)	(78)	(973)	(77)

				Pensions	Post-retirement benefits
2018	UK £m	US £m	Rest of World £m	Group £m	Group £m
Amounts charged to operating profit		20111	95111	30111	35111
Current service cost	75	72	134	281	29
Past service cost/(credit)	93	1	_	94	(27)
Net interest (income)/cost	(3)	20	19	36	49
Gains from settlements	_	_	(14)	(14)	(1)
Expenses	8	7	_	15	_
	173	100	139	412	50
Remeasurement gains/(losses) recorded in the statement of					
comprehensive income	495	(108)	196	583	145

				Pensions	Post-retirement benefits
0047	UK	US	Rest of World	Group	Group
2017	£m	£m	£m	£m	£m
Amounts charged to operating profit					
Current service cost	79	70	131	280	30
Past service cost/(credit)	37	-	_	37	(2)
Net interest cost	7	31	16	54	59
Expenses	7	12	-	19	-
	130	113	147	390	87
Remeasurement gains/(losses) recorded in the statement of					
comprehensive income	259	240	(14)	485	64

The amounts included within past service costs in the UK included £58 million (2018 – £43 million; 2017 – £37 million) of augmentation costs of which £47 million arose from Major restructuring programmes (see Note 31, 'Other provisions'). In 2018, past service costs in the UK included a charge of £40 million in relation to the estimated impact of GMP equalisation.

30. Pensions and other post-employment benefits continued

A summarised balance sheet presentation of the Group defined benefit pension schemes and other post-retirement benefits is set out in the table below:

	2019 £m	2018 £m	2017 £m
Recognised in Other non-current assets:			
Pension schemes in surplus	127	760	538
Recognised in Assets held for sale:			
Post-retirement benefits	(9)	(9)	-
Recognised in Pensions and other post-employment benefits:			
Pension schemes in deficit	(2,048)	(1,755)	(2,043)
Post-retirement benefits	(1,409)	(1,370)	(1,496)
	(3,457)	(3,125)	(3,539)

In the event of a plan wind-up, GSK believes the UK pension scheme rules provide the company with the right to a refund of surplus assets following the full settlement of plan liabilities. As a result, the net surplus in the UK defined benefit pension schemes is recognised in full.

The fair values of the assets and liabilities of the UK and US defined benefit pension schemes, together with aggregated data for other defined benefit pension schemes in the Group are as follows:

At 31 December 201	9	UK £m	US £m	Rest of World £m	Group £m
Equities:	- listed	2,904	671	638	4,213
	- unlisted	_	_	8	8
Multi-asset funds		2,700	-	_	2,700
Property:	- listed	_	-	55	55
	- unlisted	460	145	2	607
Corporate bonds:	- listed	297	855	141	1,293
	- unlisted	326	-	23	349
Government bonds:	- listed	4,923	803	889	6,615
Insurance contracts		1,406	-	832	2,238
Other assets		(35)	315	74	354
Fair value of assets		12,981	2,789	2,662	18,432
Present value of scher	ne obligations	(13,293)	(3,506)	(3,554)	(20,353)
Net surplus/(obligation	n)	(312)	(717)	(892)	(1,921)
Included in Other non-	-current assets	70	_	57	127
Included in Pensions a	and other post-employment benefits	(382)	(717)	(949)	(2,048)
		(312)	(717)	(892)	(1,921)
Actual return on plan a	assets	787	356	345	1,488

The multi-asset funds comprise investments in pooled investment vehicles that are invested across a range of asset classes, increasing diversification within the growth portfolio. The 'Other assets' category comprises cash and mark to market values of derivative positions.

Index-linked gilts held as part of a UK repo programme are included in government bonds. The related loan of £243 million at 31 December 2019 (2018 – £nil; 2017 – £773 million) is deducted within 'Other assets'.

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30. Pensions and other post-employment benefits continued

At 31 December 2018	3	UK £m	US £m	Rest of World £m	Group £m
Equities:	- listed	3,257	1,280	518	5,055
	- unlisted	_	_	7	7
Multi-asset funds		2,997	_	_	2,997
Property:	- listed	_	_	33	33
, ,	- unlisted	423	231	4	658
Corporate bonds:	- listed	404	783	111	1,298
	- unlisted	306	_	25	331
Government bonds:	- listed	3,835	286	795	4,916
Insurance contracts		770	_	831	1,601
Other assets		589	228	66	883
Fair value of assets		12,581	2,808	2,390	17,779
Present value of schem	ne obligations	(12,087)	(3,474)	(3,213)	(18,774)
Net surplus/(obligation		494	(666)	(823)	(995)
Included in Other non-	current assets	711	_	49	760
Included in Pensions a	nd other post-employment benefits	(217)	(666)	(872)	(1,755)
		494	(666)	(823)	(995)
Actual return on plan a	ssets	(88)	(123)	55	(156)
At 31 December 2017	7	UK £m	US £m	Rest of World	Group £m
Equities:	- listed	4,902	1,448	544	6,894
	- unlisted	_	-	13	13
Multi-asset funds		2,517	-	_	2,517
Property:	- unlisted	352	209	32	593
Corporate bonds:	- listed	297	820	103	1,220
Government bonds:	unlistedlisted	326 5,127	239	20 762	346 6,128
Insurance contracts	- listed	849	239	707	1,556
Other assets		(1,216)	158	71	(987)
Fair value of assets		13,154	2,874	2,252	18,280
Present value of schem	ne obligations	(13,101)	(3,445)		(19,785)
Net surplus/(obligation)	53	(571)	(987)	(1,505)
Included in Other non-	current assets	470	_	68	538
Included in Pensions a	nd other post-employment benefits	(417)	(571)	(1,055)	(2,043)
		53	(571)	(987)	(1,505)
Actual return on plan a	ssets	893	394	82	1,369

30. Pensions and other post-employment benefits continued

				Pensions	Post-retirement benefits
Movements in fair values of assets	UK £m	US £m	Rest of World	Group £m	Group £m
Assets at 1 January 2017	12,583	2,890	2,097	17,570	_
Exchange adjustments	_	(244)	24	(220)	_
Interest income	333	104	33	470	_
Expenses	(7)	(12)	_	(19)	_
Settlements and curtailments	_	-	(4)	(4)	_
Remeasurement	560	290	49	899	_
Employer contributions	225	103	116	444	101
Scheme participants' contributions	4	_	17	21	17
Benefits paid	(544)	(257)	(80)	(881)	(118)
Assets at 31 December 2017	13,154	2,874	2,252	18,280	_
Exchange adjustments	-	171	53	224	-
Interest income	323	102	29	454	-
Expenses	(8)	(7)	-	(15)	-
Settlements and curtailments	-	_	(14)	(14)	-
Remeasurement	(411)	(225)	26	(610)	-
Employer contributions	119	150	117	386	93
Scheme participants' contributions	4	-	16	20	16
Benefits paid	(600)	(257)	(89)	(946)	(109)
Assets at 31 December 2018	12,581	2,808	2,390	17,779	_
Exchange adjustments	-	(110)	(120)	(230)	-
Additions through business combinations	-	-	14	14	-
Interest income	360	111	37	508	-
Expenses	(7)	(20)	-	(27)	-
Settlements and curtailments	-	-	1	1	-
Remeasurement	427	245	312	984	-
Employer contributions	187	40	116	343	110
Scheme participants' contributions	3	-	17	20	17
Benefits paid	(570)	(285)	(105)	(960)	(127)
Assets at 31 December 2019	12,981	2,789	2,662	18,432	-

During 2019, the Group made special funding contributions to the UK pension schemes of £78 million (2018 – £nil; 2017 – £136 million) but £nil (2018 – £125 million; 2017 – £78 million) to the US schemes. In 2018, GSK reached a revised agreement with the trustees of the UK pension schemes to make additional contributions to eliminate the pension deficits identified within the schemes at the 31 December 2017 actuarial funding valuation. Based on these funding agreements, the additional contributions to eliminate the pension deficit are expected to be £75 million in 2020. Further payments have been agreed for the years 2021 to 2022 and these are included within Note 35, 'Commitments' on page 216. This funding commitment supersedes the previous agreement made in 2016. The contributions were based on a government bond yield curve approach to selecting the discount rate; the rate chosen included an allowance for expected investment returns which reflected the asset mix of the schemes.

Employer contributions for 2020, including special funding contributions, are estimated to be approximately £400 million in respect of defined benefit pension schemes and £90 million in respect of post-retirement benefits.

30. Pensions and other post-employment benefits continued

				Po Pensions	st-retirement benefits
Managed to define the coffee by a few and a second of the coffee by a second of the coffee by a few and a second of the coffee by a few and a second of the coffee by a second of the coffee	UK	US	Rest of World	Group	Group
Movements in defined benefit obligations Obligations at 1 January 2017	£m (12,884)	£m (3,752)	£m (3,018)	£m (19,654)	£m (1,693)
,	(12,004)	305	(45)	(19,654)	119
Exchange adjustments Service cost	(79)	(70)	` '		
	` ′	` ′	(131)	(280)	(30)
Past service cost/(credit)	(37)	(405)		(37)	2
Interest cost	(340)	(135)	(49)	(524)	(59)
Settlements and curtailments	(004)	(5.0)	4	4	-
Remeasurement	(301)	(50)	(63)	(414)	64
Scheme participants' contributions	(4)	_	(17)	(21)	(17)
Benefits paid	544	257	80	881	118
Obligations at 31 December 2017	(13,101)	(3,445)	(3,239)	(19,785)	(1,496)
Exchange adjustments	_	(208)	(63)	(271)	(71)
Service cost	(75)	(72)	(134)	(281)	(29)
Past service cost/(credit)	(93)	(1)	-	(94)	27
Interest cost	(320)	(122)	(48)	(490)	(49)
Settlements and curtailments	-	-	28	28	1
Remeasurement	906	117	170	1,193	145
Scheme participants' contributions	(4)	-	(16)	(20)	(16)
Benefits paid	600	257	89	946	109
Obligations at 31 December 2018	(12,087)	(3,474)	(3,213)	(18,774)	(1,379)
Exchange adjustments	_	140	177	317	50
Additions through business combinations	_	-	(56)	(56)	(48)
Service cost	(62)	(74)	(130)	(266)	(22)
Past service cost	(49)	3	15	(31)	_
Interest cost	(341)	(140)	(53)	(534)	(52)
Settlements and curtailments	_	_	8	8	_
Remeasurement	(1,321)	(246)	(390)	(1,957)	(77)
Scheme participants' contributions	(3)	_	(17)	(20)	(17)
Benefits paid	570	285	105	960	127
Obligations at 31 December 2019	(13,293)	(3,506)	(3,554)	(20,353)	(1,418)
The defined benefit pension obligation is analysed as follows:					
			2019 £m	2018 £m	2017 £m
Funded			(19,547)	(18,025)	(19,052)
Unfunded			(806)	(749)	(733)
			(20,353)	(18,774)	(19,785)
			(20,000)	(10,114)	(10,700)

The liability for the US post-retirement healthcare scheme has been assessed using the same assumptions as for the US pension scheme, together with the assumption for future medical inflation of 6.25% (2018 - 6.50%) in 2020, grading down to 5.0% in 2025 and thereafter. At 31 December 2019, the US post-retirement healthcare scheme obligation was £1,198 million (2018 - £1,179 million; 2017 - £1,254 million). Post-retirement benefits are unfunded.

30. Pensions and other post-employment benefits continued

The movement in the net defined benefit liability is as follows:

	2019 £m	2018 £m	2017 £m
At 1 January	(995)	(1,505)	(2,084)
Exchange adjustments	87	(47)	40
Additions through business combinations	(42)	_	-
Service cost	(266)	(281)	(280)
Past service cost	(31)	(94)	(37)
Interest cost	(26)	(36)	(54)
Settlements and curtailments	9	14	_
Remeasurements:			
Return on plan assets, excluding amounts included in interest	984	(610)	899
Gain from change in demographic assumptions	78	131	209
(Loss)/gain from change in financial assumptions	(2,022)	1,149	(555)
Experience losses	(13)	(87)	(68)
Employer contributions	343	386	444
Expenses	(27)	(15)	(19)
At 31 December	(1,921)	(995)	(1,505)
The remeasurements included within post-retirement benefits are detailed below:	2019	2018	2017
	£m	£m	£m
Gain from change in demographic assumptions	_	6	47
(Loss)/gain from change in financial assumptions	(80)	100	(1)
Experience gains	3	39	18
	(77)	145	64
The defined benefit pension obligation analysed by membership category is as follows:			
	2019 £m	2018 £m	2017 £m
Active	4,572	4,427	4,611
Retired	10,485	9,542	9,805
Deferred	5,296	4,805	5,369
	20,353	18,774	19,785
The post-retirement benefit obligation analysed by membership category is as follows:			
	2019 £m	2018 £m	2017 £m
Active	549	499	514
Retired	869	879	981
Deferred	_	1	1
	1,418	1,379	1,496
The weighted average duration of the defined benefit obligation is as follows:			
	2019 years	2018 years	2017 years
Pension benefits	15	15	16
Post-retirement benefits	12	11	11

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Notes to the financial statements continued

30. Pensions and other post-employment benefits continued

Sensitivity analysis

The effect of changes in assumptions used on the benefit obligations and on the 2020 annual defined benefit pension and post-retirement costs are detailed below. This information has been determined by taking into account the duration of the liabilities and the overall profile of the plan memberships.

	£m
A 0.25% decrease in discount rate would have the following approximate effect:	
Increase in annual pension cost	23
Decrease in annual post-retirement benefits cost	(1)
Increase in pension obligation	798
Increase in post-retirement benefits obligation	40
A 0.5% decrease in discount rate would have the following approximate effect:	
Increase in annual pension cost	43
Decrease in annual post-retirement benefits cost	(2)
Increase in pension obligation	1,640
Increase in post-retirement benefits obligation	82
A one-year increase in life expectancy would have the following approximate effect:	
Increase in annual pension cost	19
Increase in annual post-retirement benefits cost	2
Increase in pension obligation	725
Increase in post-retirement benefits obligation	39
A 1% increase in the rate of future healthcare inflation would have the following approximate effect:	
Increase in annual post-retirement benefits cost	2
Increase in post-retirement benefits obligation	42
A 0.25% increase in inflation would have the following approximate effect:	
Increase in annual pension cost	17
Increase in pension obligation	532

31. Other provisions

	Legal and other disputes £m	Major restructuring programmes £m	Employee related provisions £m	Other provisions £m	Total £m
At 1 January 2019	219	641	350	213	1,423
Implementation of IFRS 16	-	(30)	-	(5)	(35)
At 1 January 2019, as adjusted	219	611	350	208	1,388
Exchange adjustments	(11)	(14)	(13)	(4)	(42)
Additions through business combinations	12	_	_	24	36
Charge for the year	367	345	158	56	926
Reversed unused	(4)	(148)	(53)	(16)	(221)
Unwinding of discount	3	5	_	-	8
Utilised	(389)	(309)	(49)	(48)	(795)
Reclassifications and other movements	1	62	(6)	(19)	38
Transfer to Pension obligations	-	(47)	-	-	(47)
At 31 December 2019	198	505	387	201	1,291
To be settled within one year	134	298	138	51	621
To be settled after one year	64	207	249	150	670
At 31 December 2019	198	505	387	201	1,291

Legal and other disputes

The Group is involved in a substantial number of legal and other disputes, including notification of possible claims, as set out in Note 46 'Legal proceedings'. Provisions for legal and other disputes include amounts relating to product liability, anti-trust, government investigations, contract terminations and self insurance.

The net charge for the year of £363 million (including reversals and estimated insurance recoveries) primarily related to provisions for product liability cases, commercial disputes and various other government investigations.

The discount on the provisions increased by £3 million in 2019 (2018 – increased by £2 million). The discount was calculated using risk-adjusted projected cash flows and risk-free rates of return.

In respect of product liability claims related to certain products, provision is made when there is sufficient history of claims made and settlements to enable management to make a reliable estimate of the provision required to cover unasserted claims. The ultimate liability for such matters may vary from the amounts provided and is dependent upon the outcome of litigation proceedings, investigations and possible settlement negotiations.

It is in the nature of the Group's business that a number of these matters may be the subject of negotiation and litigation over many years. Litigation proceedings, including the various appeal procedures, often take many years to reach resolution, and out-of-court settlement discussions can also often be protracted. Indemnified disputes will result in a provision charge and a corresponding receivable.

The Group is in potential settlement discussions in a number of the disputes for which amounts have been provided and, based on its current assessment of the progress of these disputes, estimates that £134 million of the amount provided at 31 December 2019 will be settled within one year. At 31 December 2019, it was expected that £9 million (2018 – £37 million) of the provision made for legal and other disputes will be reimbursed by third parties. For a discussion of legal issues, see Note 46, 'Legal proceedings'.

Major restructuring programmes

During 2019, the Group was undertaking three major restructuring programmes: the Combined restructuring and integration programme, which is now substantially complete, the 2018 major restructuring programme and the Consumer Healthcare Joint Venture integration programme. The programmes are focused primarily on simplifying supply chain processes, rationalising the Group's manufacturing network, restructuring the Pharmaceuticals commercial operations and integrating the Pfizer consumer healthcare business.

Provisions for staff severance payments are made when management has made a formal decision to eliminate certain positions and this has been communicated to the groups of employees affected and appropriate consultation procedures completed, where appropriate. No provision is made for staff severance payments that are made immediately.

Pension augmentations arising from staff redundancies of $\pounds47$ million (2018 – $\pounds21$ million) have been charged during the year and then transferred to the pension obligations provision as shown in Note 30, 'Pensions and other post-employment benefits'. Asset write-downs have been recognised as impairments of property, plant and equipment in Note 17, 'Property, plant and equipment'. The majority of the amounts provided are expected to be utilised in the next two years.

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31. Other provisions continued

Employee related provisions

Employee related provisions include obligations for certain medical benefits to disabled employees and their spouses in the US. At 31 December 2019, the provision for these benefits amounted to £85 million (2018 - £87 million). Other employee benefits reflect a variety of provisions for severance costs, jubilee awards and other long-service benefits.

Given the nature of these provisions, the amounts are likely to be settled over many years.

Other provisions

Included in other provisions are insurance provisions of £14 million (2018 - £20 million), and a number of other provisions including vehicle insurance and regulatory matters.

32. Contingent consideration liabilities

The consideration for certain acquisitions includes amounts contingent on future events such as development milestones or sales performance. The Group has provided for the fair value of this contingent consideration as follows:

	Shionogi- ViiV Healthcare £m	Novartis Vaccines £m	Other £m	Total £m
At 1 January 2017	5,304	545	47	5,896
Remeasurement through income statement	909	53	(1)	961
Cash payments: operating cash flows	(587)	(7)	-	(594)
Cash payments: investing activities	(84)	(7)	-	(91)
At 31 December 2017	5,542	584	46	6,172
Remeasurement through income statement	1,188	56	7	1,251
Cash payments: operating cash flows	(703)	(281)	-	(984)
Cash payments: investing activities	(90)	(63)	-	(153)
At 31 December 2018	5,937	296	53	6,286
Remeasurement through income statement	31	67	(15)	83
Cash payments: operating cash flows	(767)	(13)	-	(780)
Cash payments: investing activities	(98)	(11)	(4)	(113)
Other movements	_	-	3	3
At 31 December 2019	5,103	339	37	5,479

Of the contingent consideration payable at 31 December 2019, £755 million (2018 - £837 million) is expected to be paid within one year.

The consideration payable for the acquisition of the Shionogi-ViiV Healthcare joint venture and the Novartis Vaccines business is expected to be paid over a number of years. As a result, the total estimated liabilities are discounted to their present values, shown above. The Shionogi-ViiV Healthcare contingent consideration liability is discounted at 8.5% and the Novartis Vaccines contingent consideration liability is discounted at 8% for commercialised products and at 9% for pipeline assets.

The Shionogi-ViiV Healthcare and Novartis Vaccines contingent consideration liabilities are calculated principally based on the forecast sales performance of specified products over the lives of those products.

The table below shows on an indicative basis the income statement and balance sheet sensitivity to reasonably possible changes in key inputs to the valuations of the contingent consideration liabilities.

	Shionogi-	Novartis
	ViiV Healthcare	Vaccines
Increase/(decrease) in financial liability and loss/(gain) in Income statement	£m	£m
10% increase in sales forecasts	489	65
10% decrease in sales forecasts	(490)	(65)
1% increase in discount rate	(192)	(24)
1% decrease in discount rate	205	27
5% increase in probability of milestone success		7
5% decrease in probability of milestone success		(7)
10 cent appreciation of US Dollar	302	(8)
10 cent depreciation of US Dollar	(261)	7
10 cent appreciation of Euro	106	26
10 cent depreciation of Euro	(91)	(22)

An explanation of the accounting for ViiV Healthcare is set out on page 51.

33. Other non-current liabilities

	2019 £m	2018 £m
Accruals	42	71
Deferred income	24	19
Other payables	778	848
	844	938

Other payables includes a number of employee-related liabilities including employee savings plans. In the prior year, it also included acquisition accounting market value lease adjustments which were reclassified to the Right of use asset on transition to IFRS 16.

34. Contingent liabilities

At 31 December 2019, contingent liabilities, comprising guarantees, discounted bills and other items arising in the normal course of business, amounted to £97 million (2018 – £93 million). At 31 December 2019, £1 million (2018 – £nil) of financial assets were pledged as collateral for contingent liabilities. Provision is made for the outcome of tax, legal and other disputes where it is both probable that the Group will suffer an outflow of funds and it is possible to make a reliable estimate of that outflow. At 31 December 2019, other than for those disputes where provision has been made, it was not possible to make a reliable estimate of the potential outflow of funds that might be required to settle disputes where the possibility of there being an outflow was more than remote. Descriptions of the significant legal and other disputes to which the Group is a party are set out in Note 46, 'Legal proceedings'.

35. Commitments

Contractual obligations and commitments	2019 £m	2018 £m
Contracted for but not provided in the financial statements:		
Intangible assets	9,727	4,762
Property, plant and equipment	413	665
Investments	47	82
Purchase commitments	1,047	561
Pensions	163	238
Interest on loans	8,952	9,418
Future finance charges on leases	223	16
	20,572	15,742

The commitments related to intangible assets include milestone payments, which are dependent on successful clinical development or on meeting specified sales targets, and which represent the maximum that would be paid if all milestones, however unlikely, are achieved. The amounts are not risk-adjusted or discounted. The increase in intangible commitments in 2019 is mainly attributable to a number of new R&D collaborations, including with Merck KgaA and Lyell Immunopharma.

In 2018, GSK reached an agreement with the trustees of the UK pension schemes to make additional contributions to eliminate the pension deficit identified at the 31 December 2017 actuarial funding valuation. A payment of £75 million is due in 2020 and payments of £44 million are due in both 2021 and 2022. The table above includes this commitment, but excludes the normal ongoing annual funding requirement in the UK of approximately £140 million.

The Group also has other commitments which principally relate to revenue payments to be made under licences and other alliances.

Commitments in respect of future interest payable on loans are disclosed before taking into account the effect of interest rate swaps.

36. Share capital and share premium account

			Share
	Ordinary Shares	Ordinary Shares of 25p each	
	Number	£m	£m
Share capital issued and fully paid			
At 1 January 2017	5,368,316,062	1,342	2,954
Issued under employee share schemes	4,237,758	1	55
Ordinary shares acquired by ESOP Trusts	_	-	10
At 31 December 2017	5,372,553,820	1,343	3,019
Issued under employee share schemes	6,513,804	2	72
At 31 December 2018	5,379,067,624	1,345	3,091
Issued under employee share schemes	4,034,607	1	50
Ordinary shares acquired by ESOP Trusts	-	-	33
At 31 December 2019	5,383,102,231	1,346	3,174

	31 December 2019 000	31 December 2018 000
Number of shares issuable under employee share schemes	57,871	56,723
Number of unissued shares not under option	4,559,027	4,564,209

At 31 December 2019, of the issued share capital, 36,365,045 shares were held in the ESOP Trusts, 393,505,950 shares were held as Treasury shares and 4,953,231,236 shares were in free issue. All issued shares are fully paid. The nominal, carrying and market values of the shares held in the ESOP Trusts are disclosed in Note 44, 'Employee share schemes'.

37. Movements in equity

Retained earnings and other reserves amounted to £6,885 million at 31 December 2019 (2018 – £655 million loss, as revised; 2017 - £4,430 million loss) of which £394 million (2018 – £337 million; 2017 - £334 million) related to associates and joint ventures.

An adjustment of cumulative translation exchange between retained earnings and non-controlling interests of £396 million has been made in 2019 as described in Note 1, 'Presentation of the financial statements'. The cumulative translation exchange in equity is as follows:

	Net translation exchange included in:				
	Retained earnings	Fair value reserve	Non- controlling interests	Total translation exchange	
	£m	£m	£m	£m	
At 1 January 2017	(128)	23	494	389	
Exchange movements on overseas net assets	462	-	(149)	313	
Reclassification of exchange on liquidation or disposal of overseas subsidiaries	109	_	-	109	
At 31 December 2017	443	23	345	811	
Exchange movements on overseas net assets	(458)	(22)	(1)	(481)	
At 31 December 2018, as reported	(15)	1	344	330	
Adjustment of exchange movements on overseas net assets	396		(396)	_	
At 31 December 2018, as revised	381	1	(52)	330	
Exchange movements on overseas net assets	(830)	(2)	(75)	(907)	
Reclassification of exchange movements on liquidation or disposal of overseas subsidiaries	(75)	- (4)	- (4.0.7)	(75)	
At 31 December 2019	(524)	(1)	(127)	(652)	
The analysis of other comprehensive income by equity category is as follows:					
	Retained	Other	Non-		
	earnings	reserves	controlling interests	Total	
2019	£m	£m	£m	£m	
Items that may be subsequently reclassified to income statement:	(000)	(0)		(0.00)	
Exchange movements on overseas net assets and net investment hedges	(830)	(2)	-	(832)	
Reclassification of exchange movements on liquidation or disposal of overseas subsidiaries	(75)	(00)	-	(75)	
Fair value movements on cash flow hedges	_	(20)	-	(20)	
Reclassification of cash flow hedges to income and expense	_	3	-	3	
Deferred tax on fair value movements on cash flow hedges	_	16	_	16	
Items that will not be reclassified to income statement:					
Exchange movements on overseas net assets of non-controlling interests	_	-	(75)	(75)	
Fair value movements on equity investments	_	372	-	372	
Deferred tax on fair value movements on equity investments	_	(95)	-	(95)	
Remeasurement losses on defined benefit plans	(1,050)	_	-	(1,050)	
Tax on remeasurement losses in defined benefit plans	189	-	(85)	189	
Other comprehensive (expense)/income for the year	(1,766)	274	(75)	(1,567)	
	Retained	Other	Non- controlling		
	earnings	reserves	interests	Total	
2018	£m	£m	£m	£m	
Items that may be subsequently reclassified to income statement:	(450)	(00)		(400)	
Exchange movements on overseas net assets and net investment hedges	(458)	(22)	_	(480)	
Fair value movements on cash flow hedges	_	140	_	140	
Reclassification of cash flow hedges to income and expense	_	(175)	_	(175)	
Deferred tax on fair value movements on cash flow hedges	_	(22) 20	_	(22) 20	
Deferred tax reversed on reclassification of cash flow hedges	_	20	_	20	
Items that will not be reclassified to income statement:					
Exchange movements on overseas net assets of non-controlling interests	_	_	(1)	(1)	
Fair value movements on equity investments	_	180	_	180	
Deferred tax on fair value movements on equity investments	_	10	_	10	
Remeasurement gains on defined benefit plans	728	_	_	728	
Tax on remeasurement gains in defined benefit plans	(146)	-	- (1)	(146)	
Other comprehensive income/(expense) for the year	124	131	(1)	254	

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37. Movements in equity continued

2017	Retained earnings £m	Other reserves £m	Non- controlling interests £m	Total £m
Items that may be subsequently reclassified to income statement:				
Exchange movements on overseas net assets and net investment hedges	462	-	-	462
Reclassification of exchange on liquidation or disposal of overseas subsidiaries	109	-	-	109
Fair value movements on available-for-sale investments	_	(14)	_	(14)
Reclassification of fair value movements on available-for-sale investments	_	(42)	_	(42)
Deferred tax on fair value movements on available-for-sale investments	_	47	_	47
Deferred tax reversed on reclassification of available-for-sale investments	_	(18)	_	(18)
Fair value movements on cash flow hedges	-	(10)	-	(10)
Items that will not be reclassified to income statement:				
Exchange movements on overseas net assets of non-controlling interests	-	-	(149)	(149)
Remeasurement gains on defined benefit plans	549	-	_	549
Tax on remeasurement gains in defined benefit plans	(221)	-	_	(221)
Other comprehensive income/(expense) for the year	899	(37)	(149)	713

The analysis of other reserves is as follows:

The analysis of other reserves is as follows.					
	ESOP Trust	Fair value	Cash flow	Other	
	shares	reserve	hedge reserve	reserves	Total
	£m	£m	£m	£m	£m
At 1 January 2017	(286)	380	(3)	2,129	2,220
Exchange adjustments	22	-	-	-	22
Transferred to income and expense in the year on disposals	_	(42)	-	-	(42)
Net fair value movement in the year	_	(9)	(8)	_	(17)
Ordinary shares acquired by ESOP Trusts	(656)	_	_	_	(656)
Write-down of shares held by ESOP Trusts	520	_	-	-	520
At 31 December 2017	(400)	329	(11)	2,129	2,047
Implementation of IFRS 9	_	(288)	_	_	(288)
At 31 December, as adjusted	(400)	41	(11)	2,129	1,759
Exchange adjustments	(26)	_	_	-	(26)
Transferred to Retained earnings in the year on disposal of equity investments	_	(94)	_	-	(94)
Net fair value movement in the year	_	193	(36)	-	157
Write-down of shares held by ESOP Trusts	265	_	_	_	265
At 31 December 2018	(161)	140	(47)	2,129	2,061
Exchange adjustments	10	_	_	-	10
Transferred to Retained earnings in the year on disposal of equity investments	_	5	_	-	5
Net fair value movement in the year	_	264	(1)	-	263
Ordinary shares acquired by ESOP Trusts	(328)	-		_	(328)
Write-down of shares held by ESOP Trusts	344	-	_	-	344
At 31 December 2019	(135)	409	(48)	2,129	2,355

Other reserves include various non-distributable merger and pre-merger reserves amounting to £1,849 million at 31 December 2019 (2018 – £1,849 million; 2017 – £1,849 million). Other reserves also include the capital redemption reserve created as a result of the share buy-back programme amounting to £280 million at 31 December 2019 (2018 – £280 million; 2017 – £280 million).

38. Non-controlling interests

Total non-controlling interests includes the following individually material non-controlling interests. Other non-controlling interests are individually not material.

ViiV Healthcare

GSK holds 78.3% of the ViiV Healthcare sub-group, giving rise to a material non-controlling interest. Summarised financial information in respect of the ViiV Healthcare sub-group is as follows:

	2019 £m	2018 £m	2017 £m
Turnover	4,816	4,665	4,269
Profit after taxation	2,574	560	825
Other comprehensive (expense)/income	(29)	19	20
Total comprehensive income	2,545	579	845
	2019 £m	2018 £m	
Non-current assets	2,660	2,787	
Current assets	2,905	2,643	
Total assets	5,565	5,430	
Current liabilities	(2,742)	(2,638)	
Non-current liabilities	(7,811)	(8,895)	
Total liabilities	(10,553)	(11,533)	
Net liabilities	(4,988)	(6,103)	
	2019 £m	2018 £m	2017 £m
Net cash inflow from operating activities	2,375	2,212	2,132
Net cash outflow from investing activities	(202)	(237)	(207)
Net cash outflow from financing activities	(1,947)	(1,982)	(1,820)
Increase/(decrease) in cash and bank overdrafts in the year	226	(7)	105

The above financial information relates to the ViiV Healthcare group on a stand-alone basis, before the impact of Group-related adjustments, primarily related to the recognition of preferential dividends. The profit after taxation of £2,574 million (2018 – £560 million; 2017 - £825 million) is stated after charging preferential dividends payable to GSK, Shionogi and Pfizer and after a charge of £37 million (2018 - £1,194 million; 2017 - £908 million) for remeasurement of contingent consideration payable. This consideration is expected to be paid over a number of years.

The following amounts attributable to the ViiV Healthcare group are included in GSK's Financial statements:

	2019 £m	2018 £m	2017 £m
Share of profit for the year attributable to non-controlling interest	482	254	187
Dividends paid to non-controlling interest	(310)	(332)	(381)
Non-controlling interest in the Consolidated balance sheet	(344)	(543)	(476)

38. Non-controlling interests continued

Consumer Healthcare Joint Venture

GSK holds 68% of the Consumer Healthcare sub-group, giving rise to a material non-controllling interest. Summarised financial information in respect of the Consumer Healthcare sub-group is as follows:

	2019 £m
Turnover	4,240
Profit after taxation	150
Other comprehensive expenses	(721)
Total comprehensive expenses	(571)
	2019 £m
Non-current assets	29,899
Current assets	5,713
Total assets	35,612
Current liabilities	(4,219)
Non-current liabilities	(4,027)
Total liabilities	(8,246)
Net assets	27,366
	2019 £m
Net cash inflow from operating activities	1,014
Net cash outflow from investing activities	(776)
Net cash outflow from financing activities	(78)
Decrease in cash and bank overdrafts in the period	160

The above financial information relates to the Consumer Healthcare Joint Venture on a stand-alone basis since its formation on 31 July 2019, before the impact of Group-related adjustments and the classification of cash pooling accounts with Group companies outside the Consumer Healthcare Joint Venture but after and the Major restructuring charges.

The following amounts attributable to the Consumer Healthcare Joint Venture are included in GSK's Financial statements:

	2019
	£m
Share of profit for the period attributable to non-controlling interest	69
Non-controlling interest in the Consolidated balance sheet	6,911

39. Related party transactions

At 31 December 2019, GSK owned 32 million shares or 31.6% of Innoviva Inc. which is a biopharmaceutical company listed on NASDAQ. GSK began recognising Innoviva as an associate on 1 September 2015. The royalties due from GSK to Innoviva in the year were £215 million (2018 – £209 million). At 31 December 2019, the balance payable by GSK to Innoviva was £63 million (2018 – £64 million).

At 1 January 2019, GSK held a 50% interest in Japan Vaccine Co. Ltd (JVC) through its subsidiary GlaxoSmithKline K.K. This joint venture with Daiichi Sankyo Co., Ltd was primarily responsible for the development and marketing of certain prophylactic vaccines in Japan. During 2019, GSK sold £11 million of its vaccine products into the joint venture. Daiichi Sankyo's shares in JVC were acquired by GSK during 2019 at which point, JVC ceased to be a related party.

Loans of £3.8 million to Medicxi Ventures I LP and £10.6 million to Index Ventures Life VI (Jersey) LP remained due to GSK at 31 December 2019. In 2019, GSK increased the investment in Kurma Biofund II, FCPR by £1.1 million and Apollo Therapeutics LLP by £2.1 million. Further investments were also made in Medicxi Ventures I LP of £3.1 million and in Index Ventures Life VI (Jersey) LP of £1.8 million. As part of the joint venture agreement with Qura Therapeutics LLC, the Group has an obligation to fund the joint venture \$1 million per quarter up to April 2020. On 26 June 2019, the agreement was extended for a second five-year period up to April 2025, with both GSK and its joint venture partner committing additional financial support in the amount of \$20 million. At 31 December 2019, the outstanding liability due to Qura was £16.1 million. Cash distributions were received from our investments in Medicxi Ventures I LP of £18.5 million and in Longwood Founders Fund LP of £2.8 million.

The aggregate compensation of the Directors and CET is given in Note 9, 'Employee costs'.

40. Acquisitions and disposals

Details of the acquisition and disposal of significant subsidiaries and associates, joint ventures and other businesses are given below:

2019

Business acquisitions

Pfizer consumer healthcare business

The acquisition of Pfizer's consumer healthcare business completed on 31 July 2019.

GSK and Pfizer have contributed their respective consumer healthcare businesses into a new Consumer Healthcare Joint Venture in a non-cash transaction, whereby GSK has acquired Pfizer's consumer healthcare business in return for shares in the Joint Venture. GSK has an equity interest of 68% and majority control of the Joint Venture and Pfizer has an equity interest of 32%. As the Group has control over the Consumer Healthcare Joint Venture it is consolidated within the Group's financial statements. In a number of territories, legal completion of the acquisition has not occurred because of regulatory constraints. However, the Consumer Healthcare Joint Venture obtained control of the majority of these businesses in these territories from 31 July 2019 and has consolidated the net assets of those businesses from that date, but in all cases is entitled to the benefits of the trading of businesses in the delayed territories.

The non-controlling interest in the Consumer Healthcare Joint Venture, calculated applying the proportionate goodwill method, represents Pfizer's share of the net assets of the Joint Venture, excluding goodwill.

Goodwill of £3.9 billion, which is not expected to be deductible for tax purposes, has been recognised. The goodwill represents the potential for further synergies arising from combining the acquired businesses with GSK's existing business together with the value of the workforce acquired. Total transaction costs recognised in 2018 and 2019 for the acquisition amounted to £77 million.

Since acquisition on 31 July 2019, sales of £1.2 billion arising from the Pfizer consumer healthcare business have been included in Group turnover. If the business had been acquired at the beginning of the year, it is estimated that Group turnover in 2019 would have been approximately £1.5 billion higher. The business has been integrated into the Group's existing activities and it is not practicable to identify the impact on the Group profit in the period.

Tesaro Inc.

On 22 January 2019, GSK acquired 100% of Tesaro Inc., an oncology focused biopharmaceutical company, for cash consideration of \$5.0 billion (£3.9 billion), in order to strengthen the Group's pharmaceutical pipeline. Transaction costs amounted to £31 million.

Goodwill of £1.2 billion, none of which is expected to be tax-deductible, has been recognised. The goodwill represents the potential for further synergies arising from combining the acquired businesses with GSK's existing business together with the value of the workforce acquired. Since acquisition on 22 January 2019, sales of £0.2 billion arising from the Tesaro business have been included in Group turnover. The business has been integrated into the Group's existing activities and it is not practicable to identify the impact on the Group profit in the period.

40. Acquisitions and disposals continued

The fair value of the assets acquired in business combinations, including goodwill, are set out in the table below. Amounts related to the Pfizer consumer healthcare business acquisition are provisional and subject to change.

	Pfizer consumer healthcare business £m	Tesaro £m	Other £m
Net assets acquired:			
Intangible assets	12,357	3,092	-
Property, plant and equipment	354	6	-
Right of use assets	39	40	-
Inventory	986	162	_
Trade and other receivables	546	115	35
Other assets including cash and cash equivalents	302	254	16
Trade and other payables	(779)	(282)	(39)
Net deferred tax liabilities	(2,591)	(252)	_
Other liabilities	(99)	(5)	_
Term loan	_	(445)	_
Non-controlling interest	(3,577)	-	_
Goodwill	3,854	1,169	-
Total	11,392	3,854	12
Consideration settled by shares in GSK Consumer Healthcare Joint Venture	11,392	-	_
Cash consideration paid	_	3,854	6
Fair value of investment in joint venture converted into subsidiary	_	-	6
Total consideration	11,392	3,854	12

The non-controlling interest of £3,577 million represents Pfizer's share of the fair value of the Pfizer consumer healthcare business, excluding goodwill. The total non-controlling interest initially recognised in the Consolidated statement of changes in equity of £6,887 million also includes Pfizer's share of the book value of GSK Consumer Healthcare.

Business disposals

GSK made a number of business disposals for net cash consideration received in the year of £104 million. The profit on the disposal of the businesses in the year of £201 million was calculated as follows:

	£m	Total £m
Cash consideration receivable net of subsidy payable		106
Net assets sold:		
Goodwill	(4)	
Intangible assets	(1)	
Property, plant and equipment	(44)	
Inventory	(7)	
Cash and cash equivalents	(12)	
Other net assets	(4)	
		(72)
Transaction costs		(27)
Reclassification of exchange from other comprehensive income		75
Non-controlling interest divested		16
		98
Transaction signed but not yet completed - gain on embedded derivative		143
Transaction signed but not yet completed - transaction costs		(40)
Total profit on disposal		201

Transaction signed but not yet completed

In December 2018, GSK agreed to divest Horlicks and other Consumer Healthcare nutrition brands to Unilever plc and to form a merger of GlaxoSmithKline Consumer Healthcare Limited with Hindustan Unilever Limited for a total consideration valued at approximately £3.1 billion. GlaxoSmithKline Consumer Healthcare Limited is a public company listed on the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE), in which GSK holds a 72.5% stake. Following the merger of GlaxoSmithKline Consumer Healthcare Limited with Hindustan Unilever Limited, a public company listed on the NSE and BSE, GSK will own 133.8 million Hindustan Unilever Limited shares.

40. Acquisitions and disposals continued

The Group has entered into forward foreign exchange contracts in relation to the transaction. Contracts with a value of £1.7 billion have been designated as a cash flow hedge of part of the foreign exposure arising on the transaction. Further contracts with a value of £0.6 billion have been designated as net investment hedges against INR and EUR assets. In addition, the exposure to share price movements in the forward purchase of shares in Hindustan Unilever Limited has been recognised as an embedded derivative. The embedded derivative was in an asset position and had a fair value of £240 million at 31 December 2019 (2018 – £100 million).

Associates and joint ventures

During the year, GSK made investments of £27 million into associates and joint ventures of which £11 million was paid in cash.

Cash flows

	Business acquisitions £m	Business disposals £m	Associates and joint venture investments £m
Cash consideration (paid)/received	(3,860)	161	(11)
Net deferred consideration received	_	29	_
Transaction costs	(95)	(73)	_
Cash and cash equivalents acquired/divested	384	(13)	-
Cash (outflow)/inflow	(3,571)	104	(11)

2018

Business acquisitions

There were no business acquisitions during 2018.

Business disposals

GSK made a number of small business disposals during the year for a net cash consideration of £2 million.

Cash flows	Business disposals £m	Associates and joint venture investments £m	Associates and joint venture disposals £m
Cash consideration	2	(10)	3
Net deferred consideration received	24	-	_
Cash inflow/(outflow)	26	(10)	3

2017

Business acquisitions

There were no business acquisitions during 2017.

Business disposals

GSK made a number of small business disposals during the year for a net cash consideration of £342 million, including contingent consideration receivable of £86 million. The profit on disposal was determined as follows:

	£m	Total £m
Consideration including currency forwards and purchase adjustments		342
Net assets sold:		
Goodwill	(16)	
Intangible assets	(21)	
Property, plant and equipment	(18)	
Inventory	(11)	
Cash and cash equivalents	(6)	
Other net assets	(5)	
		(77)
Transaction costs		(8)
Reclassification of exchange from other comprehensive income		(100)
Profit on disposal		157

40. Acquisitions and disposals continued

Associates and joint ventures

During the year, GSK made cash investments of £15 million into associates and joint ventures. In addition, GSK sold its holdings in two associates for £198 million in cash.

	Total
	£m
Cash consideration	198
Net book value of shares	(92)
Reclassification of exchange from other comprehensive income	(7)
Transaction costs	(5)
Profit on disposal	94

Cash flows

	Business disposals £m	and joint venture investments	and joint venture disposals £m
Cash consideration	256	(15)	198
Net deferred consideration received	39	_	-
Cash and cash equivalents divested	(6)	_	-
Transaction costs paid	(7)	_	(2)
Cash inflow/(outflow)	282	(15)	196

41. Adjustments reconciling profit after tax to operating cash flows

	2019 £m	2018 £m	2017 £m
Profit after tax	5,268	4,046	2,169
Tax on profits	953	754	1,356
Share of after-tax profits of associates and joint ventures	(74)	(31)	(13)
Finance expense net of finance income	814	717	669
Depreciation	1,231	954	988
Amortisation of intangible assets	1,103	902	934
Impairment and assets written off	825	350	1,061
Profit on sale of businesses	(201)	(63)	(157)
Profit on sale of intangible assets	(342)	(201)	(46)
Profit on sale of investments in associates	-	(3)	(94)
Profit on sale of equity investments	(2)	(4)	(37)
Gain on Novartis Consumer Healthcare Joint Venture put option hedging	_	(513)	_
Business acquisition costs	59	47	_
Changes in working capital:			
Decrease/(increase) in inventories	300	51	(461)
Increase in trade receivables	(32)	(429)	(287)
Increase in trade payables	263	131	11
(Increase)/decrease in other receivables	(160)	18	74
Contingent consideration paid (see Note 32)	(780)	(984)	(594)
Other non-cash increase in contingent consideration liabilities	83	1,250	961
Increase in other payables	89	2,362	1,741
(Decrease)/increase in pension and other provisions	(188)	102	(255)
Share-based incentive plans	365	360	333
Fair value adjustments	19	(7)	-
Other	(61)	(62)	(95)
	4,264	5,701	6,089
Cash generated from operations	9,532	9,747	8,258

42. Reconciliation of net cash flow to movement in net debt

	2019 £m	2018 £m	2017 £m
Net debt, as previously reported	(21,621)	(13,178)	(13,804)
Implementation of IFRS 16	(1,303)	_	-
Net debt at beginning of year, as adjusted	(22,924)	(13,178)	(13,804)
Increase/(decrease) in cash and bank overdrafts	826	479	(905)
Decrease in liquid investments	(1)	_	(4)
Net increase in long-term loans	(4,794)	(10,138)	(2,233)
Repayment of short-term Notes	4,160	2,067	2,636
(Increase in)/repayment of other short-term loans	(3,095)	(81)	564
Repayment of lease liabilities	214	28	23
Debt of subsidiary undertakings acquired	(524)	-	-
Exchange adjustments	1,015	(776)	585
Other non-cash movements	(92)	(22)	(40)
Movement in net debt	(2,291)	(8,443)	626
Net debt at end of year	(25,215)	(21,621)	(13,178)

Analysis of changes in net debt	At 1 January 2019 £m	IFRS 16 Implement- ation £m	Exchange £m	Debt acquired £m	Other £m	Profit and loss	Reclass- ifications £m	Cash flow £m	At 31 December 2019 £m
Liquid investments	84	-	(6)	_	_	_	_	1	79
Cash and cash equivalents	3,874	_	(86)	_	_	_	(22)	941	4,707
Cash and cash equivalents – AHFS	485	_	_	_	_	_	22	_	507
Overdrafts	(272)	-	4	-	_	_	_	(115)	(383)
	4,087	_	(82)	_	_	-	_	826	4,831
Debt due within one year:									
Commercial paper	(630)	_	109	_	_	_	-	(3,065)	(3,586)
European/US Medium Term Notes and bank facilities	(4,849)	_	233	(445)	(1)	_	(1,756)	4,160	(2,658)
Lease liabilities	(24)	(229)	4	(19)	5	_	(2)	25	(240)
Other	(18)	-	2	-	(5)	-	_	(30)	(51)
	(5,521)	(229)	348	(464)	(1)	_	(1,758)	1,090	(6,535)
Debt due after one year:									
European/US Medium Term Notes and bank facilities	(20,227)	_	715	_	(3)	(27)	1,756	(4,794)	(22,580)
Lease liabilities	(44)	(1,074)	40	(60)	(101)	_	2	227	(1,010)
	(20,271)	(1,074)	755	(60)	(104)	(27)	1,758	(4,567)	(23,590)
Net debt	(21,621)	(1,303)	1,015	(524)	(105)	(27)	_	(2,650)	(25,215)
Analysis of changes in liabilities from financia	ng activities								
Debt due within one year	(5,521)	(229)	348	(464)	(1)	-	(1,758)	1,090	(6,535)
Debt due after one year	(20,271)	(1,074)	755	(60)	(104)	(27)	1,758	(4,567)	(23,590)
Hedge of borrowings:									
Derivative financial instruments	129	-	(1)	_	188	21	_	(2)	335
Other financing items	-	-	(189)	-	-	-	_	189	-
Interest payable	(239)	_	1	_	(3)	(898)	_	895	(244)
Total liabilities from financing activities	(25,902)	(1,303)	914	(524)	80	(904)	_	(2,395)	(30,034)

For further information on significant changes in net debt see Note 29, 'Net debt'.

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43. Financial instruments and related disclosures

The objective of GSK's Treasury activity is to minimise the post-tax net cost of financial operations and reduce its volatility to benefit earnings and cash flows. GSK uses a variety of financial instruments to finance its operations and derivative financial instruments to manage market risks from these operations. Derivatives principally comprise of foreign exchange forward contracts and swaps which are used to swap borrowings and liquid assets into currencies required for Group purposes as well as interest rate swaps which are used to manage exposure to financial risks from changes in interest rates. These financial instruments reduce the uncertainty of foreign currency transactions and interest payments.

Derivatives are used exclusively for hedging purposes in relation to underlying business activities and not as trading or speculative instruments.

Capital management

GSK's financial strategy supports the Group's strategic priorities and is regularly reviewed by the Board. GSK manages the capital structure of the Group through an appropriate mix of debt and equity.

The capital structure of the Group consists of net debt of £25.2 billion (see Note 29, 'Net debt') and total equity, including items related to non-controlling interests, of £18.4 billion (see 'Consolidated statement of changes in equity' on page 168). Total capital, including that provided by non-controlling interests, is £43.6 billion.

The Group continues to manage its financial policies to a credit profile that particularly targets short-term credit ratings of A-1 and P-1 while maintaining single A long-term ratings consistent with those targets. The Group's long-term credit rating with Standard and Poor's is A+ (negative outlook) and with Moody's Investor Services ('Moody's') it is A2 (negative outlook). The Group's short-term credit ratings are A-1 and P-1 with Standard and Poor's and Moody's respectively.

Liquidity risk management

GSK's policy is to borrow centrally in order to meet anticipated funding requirements. The strategy is to diversify liquidity sources using a range of facilities and to maintain broad access to financial markets.

At 31 December 2019, GSK had £6.9 billion of borrowings repayable within one year and held £5.3 billion of cash and cash equivalents and liquid investments of which £3.6 billion was held centrally. GSK has access to short-term finance under a \$10 billion (£7.6 billion) US commercial paper programme; \$4.8 billion (£3.6 billion) was in issue at 31 December 2019 (2018 – \$0.8 billion (£0.6 billion)). GSK has a £1.9 billion three-year committed facility and a \$2.5 billion (£1.9 billion) 364-day committed facility. Both the three-year committed facility and the 364-day committed facility were agreed in September 2019. These facilities were undrawn at 31 December 2019. GSK considers this level of committed facilities to be adequate, given current liquidity requirements.

Additional bank facilities were agreed in 2018 to support transactions and one remains active at 31 December 2019. In June 2018, £3.5 billion was drawn to support the acquisition from Novartis of the remaining stake in the Consumer Healthcare Joint Venture. £2.5 billion was repaid in November 2019 leaving £1.0 billion outstanding at 31 December 2019. In December 2019, this facility was extended to June 2020.

GSK has a £20.0 billion European Medium Term Note programme and at 31 December 2019, £11.8 billion of notes were in issue under this programme. The Group also had \$16.4 billion (£12.4 billion) of notes in issue at 31 December 2019 under a US shelf registration. GSK's borrowings mature at dates between 2020 and 2045.

The put option owned by Pfizer in ViiV Healthcare is exercisable. In reviewing liquidity requirements GSK considers that sufficient financing options are available should the put option be exercised.

Market risk

Interest rate risk management

The objective of GSK's Treasury activity is to minimise the effective net interest cost and to balance the mix of debt at fixed and floating rates over time.

The Group's main interest rate risk arises from borrowings and investments with floating rates and refinancing of maturing fixed rate debt where any changes in interest rates will affect future cash flows or the fair values of financial instruments. The policy on interest rate risk management limits the net amount of floating rate debt to a specific cap, reviewed and agreed no less than annually by the Board.

The majority of debt is issued at fixed interest rates and changes in the floating rates of interest do not significantly affect the Group's net interest charge. This includes some borrowings for which interest rate swaps are in place which removes the impact of the associated periodic repricing. Short-term borrowings including bank facilities are exposed to the risk of future changes in market interest rate as are the majority of cash and liquid investments.

Interest rate benchmark reform

'Interest rate benchmark reform – Amendments to IFRS 9, IAS 39 and IFRS 7' was issued by the IASB in September 2019. These amendments modify specific hedge accounting requirements to allow hedge accounting to continue for affected hedges during the period of uncertainty before the hedged items or hedging instruments affected by the current interest rate benchmarks are amended as a result of the ongoing interest rate benchmark reforms.

At 31 December 2019, the Group was not directly exposed to interest rate benchmark reform as it held no interest rate derivatives that referenced LIBOR and matured after the end of 2021 and all floating rate bonds were due to mature before the end of 2021.

43. Financial instruments and related disclosures continued

The Group has closely monitored the market and the output from the various industry working groups managing the transition to new benchmark interest rates. This includes announcements made by LIBOR regulators, including the Financial Conduct Authority (FCA) and the US Commodity Futures Trading Commission, regarding the transition away from LIBOR (including GBP LIBOR, USD LIBOR and EURIBOR) to the Sterling Overnight Index Average Rate (SONIA), the Secured Overnight Financing Rate (SOFR), and the Euro Short-Term Rate (€STR) respectively. The FCA has made it clear that, at the end of 2021, it will no longer seek to persuade, or compel, banks to submit to LIBOR.

The Group is undertaking an interest rate benchmark transition programme to identify potential exposures within the business and deliver a smooth transition to appropriate alternative benchmark rates.

Foreign exchange risk management

The Group's objective is to minimise the exposure of overseas operating subsidiaries to transaction risk by matching local currency income with local currency costs where possible. Foreign currency transaction exposures arising on external and internal trade flows are selectively hedged. GSK's internal trading transactions are matched centrally and inter-company payment terms are managed to reduce foreign currency risk. Where possible, GSK manages the cash surpluses or borrowing requirements of subsidiary companies centrally using forward contracts to hedge future repayments back into the originating currency.

In order to reduce foreign currency translation exposure, the Group seeks to denominate borrowings in the currencies of our principal assets and cash flows. These are primarily denominated in US Dollars, Euros and Sterling. Borrowings can be swapped into other currencies as required.

Borrowings denominated in, or swapped into, foreign currencies that match investments in overseas Group assets may be treated as a hedge against the relevant assets. Forward contracts in major currencies are also used to reduce exposure to the Group's investment in overseas assets (see 'Net investment hedges' section of this note for further details).

Credit risk

Credit risk is the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group and arises on cash and cash equivalents and favourable derivative financial instruments held with banks and financial institutions as well as credit exposures to wholesale and retail customers, including outstanding receivables.

The Group considers its maximum credit risk at 31 December 2019 to be £12,991 million (31 December 2018 − £11,080 million) which is the total of the Group's financial assets with the exception of 'Other investments' (comprising equity investments) which bear equity risk rather than credit risk. See page 231 for details on the Group's total financial assets. At 31 December 2019, GSK's greatest concentration of credit risk was £0.9 billion with Legal and General Investment Management Class 4 GBP liquidity fund (AAA/Aaa) (2018 − £0.7 billion with Citibank (A/A1)).

There has been no change in the estimation techniques or significant assumptions made during the current reporting period in assessing the loss allowance for financial assets at amortised cost since the adoption of IFRS 9 at the start of the 2018 reporting period.

Treasury-related credit risk

GSK sets global counterparty limits for each of GSK's banking and investment counterparties based on long-term credit ratings from Moody's and Standard and Poor's. Usage of these limits is monitored daily.

GSK actively manages its exposure to credit risk, reducing surplus cash balances wherever possible. This is part of GSK's strategy to regionalise cash management and to concentrate cash centrally as much as possible. The table below sets out the credit exposure to counterparties by rating for liquid investments, cash and cash equivalents and derivatives.

The gross asset position on each derivative contract is considered for the purpose of this table, although, under ISDA agreements, the amount at risk is the net position with each counterparty. Table (e) on page 239 sets out the Group's financial assets and liabilities on an offset basis.

At 31 December 2019, £23 million of cash is categorised as held with unrated or sub-investment grade rated counterparties (lower than BBB-/Baa3) of which £2 million is cash in transit. The remaining exposure is concentrated in overseas banks used for local cash management or investment purposes, including: £8 million in Nigeria held with United Bank for Africa, Zenith Bank and Stanbic IBTC Bank; £3 million with BTV in Austria; £1 million with Bradesco in Brazil; £1 million with Banco de la Nacion in Panama; and £1 million with Halk Bank in the UK. Of the £605 million of bank balances and deposits held with BBB/Baa rated counterparties, £46 million was held with BBB-/Baa3 rated counterparties, including balances or deposits of £25 million with HDFC Bank in India and £20 million with State Bank of India. These banks are used for local investment purposes.

GSK measures expected credit losses over cash and cash equivalents as a function of individual counterparty credit ratings and associated 12 month default rates. Expected credit losses over cash and cash equivalents and third-party financial derivatives are deemed to be immaterial and no such loss has been experienced during 2019.

Investor information

Notes to the financial statements continued

43. Financial instruments and related disclosures continued

Credit ratings are assigned by Standard and Poor's and Moody's respectively. Where the opinions of the two rating agencies differ, GSK assigns the lower rating of the two to the counterparty. Where local rating agency or Fitch data is the only source available, the ratings are converted to global ratings equivalent to those of Standard and Poor's or Moody's using published conversion tables. These credit ratings form the basis of the assessment of the expected credit loss on Treasury related balances held at amortised cost being bank balances and deposits and Government securities.

2019	AAA/Aaa £m	AA/Aa £m	A/A £m	BBB/Baa £m	and below /unrated £m	Total £m
Bank balances and deposits	_	538	1,906	605	23	3,072
US Treasury and Treasury repo only money market funds	102	_	-	_	-	102
Liquidity funds	2,040	_	-	_	-	2,040
Government securities	_	78	-	1	-	79
3rd party financial derivatives	_	35	225	10	-	270
Total	2,142	651	2,131	616	23	5,563

2018	AAA/Aaa £m	AA/Aa £m	A/A £m	BBB/Baa £m	BB+/Ba1 and below /unrated £m	Total £m
Bank balances and deposits	_	662	1,275	381	20	2,338
US Treasury and Treasury repo only money market funds	449	_	-	_	_	449
Liquidity funds	1,572	_	-	-	_	1,572
Government securities	_	83	-	1	_	84
3rd party financial derivatives	_	19	127	4	_	150
Total	2,021	764	1,402	386	20	4,593

GSK's centrally managed cash reserves amounted to £3.6 billion at 31 December 2019, all available within three months. This includes £1.3 billion of cash managed by the Group for ViiV Healthcare, a 78.3% owned subsidiary and £1.0 billion of cash managed by the Group for GSK Consumer Healthcare, a 68% owned subsidiary. The Group has invested centrally managed liquid assets in bank deposits, Aaa/AAA rated US Treasury and Treasury repo only money market funds and Aaa/AAA rated liquidity funds.

Wholesale and retail credit risk

Outside the US, no customer accounts for more than 5% of the Group's trade receivables balance.

In the US, in line with other pharmaceutical companies, the Group sells its products through a small number of wholesalers in addition to hospitals, pharmacies, physicians and other groups. Sales to the three largest wholesalers amounted to approximately 78% of the sales of the US Pharmaceuticals and Vaccines businesses in 2019. At 31 December 2019, the Group had trade receivables due from these three wholesalers totalling £2,079 million (2018 – £2,134 million). The Group is exposed to a concentration of credit risk in respect of these wholesalers such that, if one or more of them encounters financial difficulty, it could materially and adversely affect the Group's financial results.

The Group's credit risk monitoring activities relating to these wholesalers include a review of their quarterly financial information and Standard & Poor's credit ratings, development of GSK internal risk ratings, and establishment and periodic review of credit limits.

All new customers are subject to a credit vetting process and existing customers will be subject to a review at least annually. The vetting process and subsequent reviews involve obtaining information including the customer's status as a government or private sector entity, audited financial statements, credit bureau reports, debt rating agency (e.g. Moody's, Standard & Poor's) reports, payment performance history (from trade references, industry credit groups) and bank references.

Trade receivables consist of amounts due from a large number of customers, spread across diverse industries and geographical areas. Ongoing credit evaluation is performed on the financial condition of accounts receivable and, where appropriate, credit insurance is purchased or factoring arrangements put in place.

The amount of information obtained is proportional to the level of exposure being considered. The information is evaluated quantitatively (i.e. credit score) and qualitatively (i.e. judgement) in conjunction with the customer's credit requirements to determine a credit limit.

Trade receivables are grouped into customer segments that have similar loss patterns to assess credit risk while other receivables and other financial assets are assessed individually. Historical and forward-looking information is considered to determine the appropriate expected credit loss allowance. The Group believes there is no further credit risk provision required in excess of the allowance for expected credit losses (see Note 25, 'Trade and other receivables').

43. Financial instruments and related disclosures continued

Credit enhancements

The Group uses credit enhancements including factoring and credit insurance to minimise the credit risk of the trade receivables in the Group. At 31 December 2019, £250 million (2018 – £240 million) of GSK trade receivables were insured protecting GSK's trade receivables balance from loss due to credit risks such as default, insolvency and bankruptcy.

Each Group entity assesses the credit risk of its private customers to determine if credit insurance is required.

Factoring arrangements are managed locally by entities and are used to mitigate risk arising from large credit risk concentrations. All factoring arrangements are non-recourse.

Fair value of financial assets and liabilities

The table on page 231 presents the carrying amounts and the fair values of the Group's financial assets and liabilities at 31 December 2019 and 31 December 2018.

The fair values of the financial assets and liabilities are included at the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The following methods and assumptions are used to measure the fair values of significant financial instruments carried at fair value on the balance sheet:

- Other investments equity investments traded in an active market determined by reference to the relevant stock exchange quoted bid price; other equity investments determined by reference to the current market value of similar instruments, recent financing rounds or the discounted cash flows of the underlying net assets
- Trade receivables based on invoiced amount
- Interest rate swaps, foreign exchange forward contracts, swaps and options – based on the present value of contractual cash flows or option valuation models using market sourced data (exchange rates or interest rates) at the balance sheet date
- Company-owned life insurance policies based on cash surrender value
- Cash and cash equivalents based on net asset value of the funds
- Contingent consideration for business acquisitions and divestments – based on present values of expected future cash flows.

The following methods and assumptions are used to estimate the fair values of significant financial instruments which are not measured at fair value on the balance sheet:

- Receivables and payables, including put options approximates to the carrying amount
- Liquid investments approximates to the carrying amount
- Cash and cash equivalents approximates to the carrying amount
- Long-term loans based on quoted market prices (a level 1 fair value measurement) in the case of European and US
 Medium Term Notes; approximates to the carrying amount in the case of other fixed rate borrowings and floating rate bank loans
- Short-term loans, overdrafts and commercial paper approximates to the carrying amount because of the short maturity of these instruments
- Lease liabilities approximates to the carrying amount.

43. Financial instruments and related disclosures continued

		2019			2018
		Carrying value	Fair value	Carrying value	Fair value
	Notes	£m	£m	£m	£m
Financial assets measured at amortised cost:					
Other non-current assets	b	76	76	49	49
Trade and other receivables	b	4,533	4,533	3,761	3,761
Liquid investments		79	79	84	84
Cash and cash equivalents		3,072	3,072	2,338	2,338
Other items in Assets held for sale	b	69	69	47	47
Financial assets measured at fair value through other comprehensive income (FVTOCI):					
Other investments designated at FVTOCI	a	1,781	1,781	1,250	1,250
Trade and other receivables	a,b	1,665	1,665	1,687	1,687
Financial assets mandatorily measured at fair value through profit or loss (FVTPL):					
Other investments	а	56	56	72	72
Other non-current assets	a,b	787	787	716	716
Trade and other receivables	a,b	44	44	120	120
Held for trading derivatives that are not in a designated and					
effective hedging relationship	a,d,e	357	357	188	188
Cash and cash equivalents	а	2,142	2,142	2,021	2,021
Derivatives designated and effective as hedging instruments (fair value movements through Other comprehensive income)	a,d,e	167	167	69	69
Total financial assets		14,828	14,828	12,402	12,402
Financial liabilities measured at amortised cost:					
Borrowings excluding obligations under lease liabilities:					
bonds in a designated hedging relationship	d	(8,636)	(9,085)	(8,213)	(8,279
- other bonds		(15,582)	(19,048)	(13,307)	(15,475
bank loans and overdrafts		(416)	(416)	(290)	(290
- commercial paper		(3,586)	(3,586)	(630)	(630
- other borrowings		(1,038)	(1,038)	(3,556)	(3,556
Total borrowings excluding lease liabilities	f	(29,258)	(33,173)	(25,996)	(28,230
Lease liabilities		(1,250)	(1,250)	(68)	(68
Total borrowings		(30,508)	(34,423)	(26,064)	(28,298
Trade and other payables	С	(14,177)	(14,177)	(13,338)	(13,338
Other provisions	С	(94)	(94)	(58)	(58
Other non-current liabilities	С	(84)	(84)	(149)	(149
Other items in Assets held for sale	С	(126)	(126)	(167)	(167
E		, ,	` '	. ,	•
Financial liabilities mandatorily measured at fair value through profit or loss (FVTPL):		(= 4=0)	(= 4=0)	(0.000)	(0.000
Contingent consideration liabilities	a,c	(5,479)	(5,479)	(6,286)	(6,286
Held for trading derivatives that are not in a designated and effective hedging relationship	a,d,e	(141)	(141)	(23)	(23
Derivatives designated and effective as hedging instruments (fair value movements					
through Other comprehensive income)	a,d,e	(48)	(48)	(105)	(105
Total financial liabilities		(50,657)	(54,572)	(46,190)	(48,424
Net financial assets and financial liabilities		(35,829)	(39,744)	(33,788)	(36,022
		,,	, , ,	. , , ,	,

The valuation methodology used to measure fair value in the above table is described and categorised on page 230.

Trade and other receivables, Other non-current assets, Trade and other payables, Other provisions, Other non-current liabilities, Contingent consideration liabilities and Other items in Assets held for sale are reconciled to the relevant Notes on pages 233 and 234.

Cash and cash equivalents in the table above include £507 million reported in Assets held for sale (see Note 27, 'Assets held for sale').

43. Financial instruments and related disclosures continued

Fair value of investments in GSK shares

At 31 December 2019, the Employee Share Ownership Plan (ESOP) Trusts held GSK shares with a carrying value of £135 million (2018 – £161 million) and a market value of £647 million (2018 – £619 million) based on quoted market price. The shares are held by the ESOP Trusts to satisfy future exercises of options and awards under employee incentive schemes. In 2019, the carrying value, which is the lower of cost or expected proceeds, of these shares has been recognised as a deduction from other reserves. At 31 December 2019, GSK held Treasury shares at a cost of £5,505 million (2018 – £5,800 million) which has been deducted from retained earnings.

(a) Financial instruments held at fair value

The following tables categorise the Group's financial assets and liabilities held at fair value by the valuation methodology applied in determining their fair value. Where possible, quoted prices in active markets are used (Level 1). Where such prices are not available, the asset or liability is classified as Level 2, provided all significant inputs to the valuation model used are based on observable market data. If one or more of the significant inputs to the valuation model is not based on observable market data, the instrument is classified as Level 3. Other investments classified as Level 3 in the tables below comprise equity investments in unlisted entities with which the Group has entered into research collaborations and also investments in emerging life science companies.

At 31 December 2019	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets at fair value				
Financial assets measured at fair value through other comprehensive income (FVTOCI):				
Other investments designated at FVTOCI	1,128	_	653	1,781
Trade and other receivables	_	1,665	_	1,665
Financial assets mandatorily measured at fair value through profit or loss (FVTPL):				
Other investments	_	_	56	56
Other non-current assets	_	743	44	787
Trade and other receivables	_	44	_	44
Held for trading derivatives that are not in a designated and effective hedging relationship	_	353	4	357
Cash and cash equivalents	2,142	_	_	2,142
Derivatives designated and effective as hedging instruments (fair value movements through OCI)	_	167	-	167
	3,270	2,972	757	6,999
Financial liabilities at fair value				
Financial liabilities mandatorily measured at fair value through profit or loss (FVTPL):				
Contingent consideration liabilities	_	_	(5,479)	(5,479)
Held for trading derivatives that are not in a designated and effective hedging relationship	_	(141)	_	(141)
Derivatives designated and effective as hedging instruments (fair value movements through OCI)	_	(48)	_	(48)
	_	(189)	(5,479)	(5,668)
	Level 1	Level 2	Level 3	Total
At 31 December 2018	£m	£m	£m	£m
Financial assets at fair value				
Financial assets at fair value through other comprehensive income (FVTOCI):				
Other investments designated at FVTOCI	656	_	594	1,250
Trade and other receivables	_	1,687	_	1,687
Financial assets mandatorily measured at fair value through profit or loss (FVTPL):				
Other investments	_	_	72	72
Other non-current assets	_	675	41	716
Trade and other receivables	_	79	41	120
Held for trading derivatives that are not in a designated and effective hedging relationship	_	182	6	188
Cash and cash equivalents	2,021	_	_	2,021
Derivatives designated and effective as hedging instruments (fair value movements through OCI)		69		69
	2,677	2,692	754	6,123
Financial liabilities at fair value				
Financial liabilities mandatorily measured at fair value through profit or loss (FVTPL):				
Financial liabilities mandatorily measured at fair value through profit or loss (FVTPL): Contingent consideration liabilities	_	_	(6,286)	(6,286)
	- -	- (23)	(6,286) –	(6,286) (23)
Contingent consideration liabilities	- - -	- (23) (105)	(6,286) - -	. , ,

Investor information

Notes to the financial statements continued

43. Financial instruments and related disclosures continued

Movements in the year for financial instruments measured using Level 3 valuation methods are presented below:

	2019	2018
	£m	£m
At 1 January	(5,532)	(5,657)
Net losses recognised in the income statement	(103)	(1,229)
Net gains recognised in other comprehensive income	31	146
Settlement of contingent consideration liabilities	893	1,137
Settlement of contingent consideration receivables	(42)	(42)
Additions	241	381
Disposals and settlements	(33)	(27)
Transfers from Level 3	(174)	(241)
Other movements	(3)	-
At 31 December	(4,722)	(5,532)

Net losses of £103 million (2018 - £1,229 million) attributable to Level 3 financial instruments which were recognised in the income statement included net losses of £97 million (2018 - £1,229 million) in respect of financial instruments which were held at the end of the year. Losses of £105 million (2018 - £1,229 million) were reported in Other operating income and gains of £2 million (2018 - £nil) were reported in Finance income. Charges of £31 million (2018 - £1,188 million) arose from remeasurement of the contingent consideration payable for the acquisition of the former Shionogi-ViiV Healthcare joint venture and £67 million (2018 - £56 million) arose from remeasurement of the contingent consideration payable for the acquisition of the Novartis Vaccines business. Net gains of £31 million (2018 - £146 million) attributable to Level 3 financial instruments reported in Other comprehensive income as Fair value movements on equity investments included net gains of £38 million (2018 -net gains of £140 million) in respect of financial instruments held at the end of the year, of which net gains of £174 million (2018 - net gains of £98 million) arose prior to transfer from Level 3 on equity investments which transferred to a Level 1 valuation methodology as a result of listing on a recognised stock exchange during the year. Net gains and losses include the impact of exchange movements.

Financial liabilities measured using Level 3 valuation methods at 31 December included £5,103 million (2018 – £5,937 million) in respect of contingent consideration payable for the acquisition in 2012 of the former Shionogi-ViiV Healthcare joint venture. This consideration is expected to be paid over a number of years and will vary in line with the future performance of specified products and movements in certain foreign currencies. They also included £339 million (2018 – £296 million) in respect of contingent consideration for the acquisition in 2015 of the Novartis Vaccines business. This consideration is expected to be paid over a number of years and will vary in line with the future performance of specified products, the achievement of certain milestone targets and movements in certain foreign currencies. Sensitivity analysis on these balances is provided in Note 32, 'Contingent consideration liabilities'.

(b) Trade and other receivables, Other non-current assets and other items in Assets held for sale in scope of IFRS 9

The following table reconciles financial instruments within Trade and other receivables, Other non-current assets and other items in Assets held for sale which fall within the scope of IFRS 9 to the relevant balance sheet amounts. The financial assets are predominantly non-interest earning. Financial instruments within the Other non-current assets balance include company-owned life insurance policies. Non-financial instruments include tax receivables, pension surplus balances and prepayments, which are outside the scope of IFRS 9.

						2019						2018
	At	At	Amortised	Financial	Non- financial		At	At	Amortised	Financial	Non- financial	
	FVTPL £m	FVTOCI £m	cost £m	instruments £m	instruments £m	Total £m	FVTPL £m	FVTOCI £m	cost £m	instruments £m	instruments £m	Total £m
Trade and other receivables (Note 25)	44	1,665	4,533	6,242	960	7,202	120	1,687	3,761	5,568	855	6,423
Other non-current assets (Note 23)	787	_	76	863	157	1,020	716	_	49	765	811	1,576
Other items in Assets held for sale (Note 27)	-	_	69	69	22	91	_	_	47	47	37	84
	831	1,665	4,678	7,174	1,139	8,313	836	1,687	3,857	6,380	1,703	8,083

43. Financial instruments and related disclosures continued

(c) Trade and other payables, Other provisions, Other non-current liabilities, Contingent consideration liabilities and other items in Assets held for sale in scope of IFRS 9

The following table reconciles financial instruments within Trade and other payables, Other provisions, Other non-current liabilities, Contingent consideration liabilities and other items in Assets held for sale which fall within the scope of IFRS 9 to the relevant balance sheet amounts. The financial liabilities are predominantly non-interest bearing. Accrued wages and salaries are included within financial liabilities. Non-financial instruments include payments on account, tax and social security payables and provisions which do not arise from contractual obligations to deliver cash or another financial asset, which are outside the scope of IFRS 9.

					2019					2018
_	At FVTPL	Amortised cost	Financial instruments	Non- financial instruments £m	Total £m	At FVTPL £m	Amortised cost	Financial instruments £m	Non- financial instruments £m	Total £m
Trade and other payables (Note 28)	_	(14,177)	(14,177)	(762)	(14,939)	_	(13,338)	(13,338)	(699)	(14,037)
Other provisions (Note 31)	_	(94)	(94)	(1,197)	(1,291)	_	(58)	(58)	(1,365)	(1,423)
Other non-current liabilities (Note 33)	_	(84)	(84)	(760)	(844)	_	(149)	(149)	(789)	(938)
Contingent consideration liabilities (Note 32)	(5,479)	_	(5,479)	_	(5,479)	(6,286)	_	(6,286)	_	(6,286)
Other items in Assets held for sale (Note 27)	_	(126)	(126)	(87)	(213)	_	(167)	(167)	(53)	(220)
	(5,479)	(14,481)	(19,960)	(2,806)	(22,766)	(6,286)	(13,712)	(19,998)	(2,906)	(22,904)

(d) Derivative financial instruments and hedging programmes

Derivatives are only used for economic hedging purposes and not as speculative investments and are classified as 'held for trading', other than designated and effective hedging instruments, and are presented as current assets or liabilities if they are expected to be settled within 12 months after the end of the reporting period, otherwise they are classified as non-current. The Group has the following derivative financial instruments:

		2019 Fair value		2018 Fair value	
	Assets £m	Liabilities £m	Assets £m	Liabilities £m	
Non-current					
Cash flow hedges – Interest rate swap contracts (principal amount – £850 million (2018 – £1,267 million))	1	_	_	(1)	
Net investment hedges – Cross currency swaps (principal amount – £1,514 million (2018 – £1,575 million))	98	_	64	-	
Current					
Cash flow hedges – Interest rate swap contracts (principal amount – £637 million (2018 – £nil))	_	(1)	_	_	
Cash flow hedges – Foreign exchange contracts (principal amount – £1,746 million (2018 – £1,809 million))	24	(17)	1	(56)	
Net investment hedges – Foreign exchange contracts (principal amount – £9,376 million (2018 – £7,316 million))	44	(30)	4	(48)	
Derivatives designated and effective as hedging instruments	167	(48)	69	(105)	
Non-current					
Embedded and other derivatives	4	(1)	4	-	
Current					
Foreign exchange contracts (principal amount – £18,856 million (2018 – £18,537 million))	103	(140)	82	(23)	
Embedded and other derivatives	250	_	102	-	
Derivatives classified as held for trading	357	(141)	188	(23)	
Total derivative instruments	524	(189)	257	(128)	

Fair value hedges

At 31 December 2019, the Group had no designated fair value hedges.

Investor information

Notes to the financial statements continued

43. Financial instruments and related disclosures continued

Net investment hedges

At 31 December 2019, certain foreign exchange contracts were designated as net investment hedges in respect of the foreign currency translation risk arising on consolidation of the Group's net investment in its European (Euro), Singaporean (SGD), Indian (INR) and Japanese (JPY) foreign operations as shown in the table above.

The carrying value of bonds on page 231 included £8,636 million (2018 − £8,213 million) that were designated as hedging instruments in net investment hedges.

Cash flow hedges

During 2018 and 2019, the Group entered into forward foreign exchange contracts which have been designated as cash flow hedges. These were entered into to hedge the foreign exchange exposure arising on cash flows from Euro denominated coupon payments relating to notes issued under the Group's European Medium Term Note programme, on the buyout of Novartis' non-controlling interest in the Consumer Healthcare Joint Venture in 2018, on the planned divestment of *Horlicks* and other nutrition brands in 2019 and on refinancing existing debt maturities.

The Group manages its cash flow interest rate risk by using floating-to-fixed interest rate swaps. In addition, the Group carries a balance in reserves that arose from pre-hedging fluctuations in long-term interest rates when pricing bonds issued in prior years and in the current year. The balance is reclassified to finance costs over the life of these bonds.

Foreign exchange risk

In the current year, the Group has designated certain foreign exchange forward contracts and swaps as cash flow and net investment hedges. Foreign exchange derivative financial assets and liabilities are presented in the line 'Derivative financial instruments' (either as assets or liabilities) on the Consolidated balance sheet. The following tables detail the foreign exchange forward contracts and swaps outstanding at the end of the reporting period, as well as information on the related hedged items. The notional value of foreign exchange forward contracts and swaps is the absolute total of outstanding positions at the balance sheet date.

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument. The Group enters into hedge relationships where the critical terms of the hedging instrument match exactly with the terms of the hedged item, and so a qualitative assessment of effectiveness is performed. If changes in circumstances affect the terms of the hedged item such that the critical terms no longer match exactly with the critical terms of the hedging instrument, the Group uses the hypothetical derivative method to assess effectiveness.

The main source of hedge ineffectiveness in these hedging relationships is the effect of the counterparty and the Group's own credit risk on the fair value of the foreign exchange forward contracts and swaps, which is not reflected in the fair value of the hedged item attributable to changes in foreign exchange rates and ineffectiveness on rolling the cash flow hedges of the divestments mentioned above. No other sources of ineffectiveness emerged from these hedging relationships. Ineffectiveness to be recorded from cash flow hedges amounted to £7 million in 2019 (2018 – £nil). No ineffectiveness was recorded from net investment hedges (2018 – £nil).

Included in the table below under 'Borrowings' are bonds with notional value of US\$2 billion that have been swapped to fixed interest rate EUR debt with a cross currency interest rate swap.

				2019
Hedging instruments	Average exchange rate	Foreign currency	Notional value £m	Carrying value £m
Cash flow hedges				
Foreign exchange contracts				
Buy foreign currency:				
3 to 6 months	1.14	EUR	47	(1)
Over 6 months	1.15	EUR	23	-
Sell foreign currency:				
Less than 3 months	93.85	INR/GBP	999	5
Less than 3 months	52.82	INR/SGD	677	3
			1,746	7

43. Financial instruments and related disclosures continued

				2019
Hedging instruments	Average exchange rate	Foreign currency	Notional value £m	Carrying value £m
Net investment hedges				
Foreign exchange contracts				
Sell foreign currency:				
Less than 3 months	1.18	EUR	8,250	2
Less than 3 months	1.77	SGD	471	3
Less than 3 months	92.23	INR	239	6
Less than 3 months	142.26	JPY	416	3
Borrowings (including cross currency interest rate swaps):				
3 to 6 months		EUR	638	(638)
Over 6 months		EUR	7,914	(7,998)
			17,928	(8,622)

		2019
Hedged items	Periodic change in value for calculating hedge ineffectiveness £m	Cumulative balance in cash flow hedge reserve/foreign currency translation reserve for continuing hedges £m
Cash flow hedges Variability in cash flows from a highly probable forecast transaction	(7)	(42)
Variability in cash flows from foreign exchange exposure arising on Euro denominated coupon payments relating to debt issued	(1)	1
Net investment hedges Net investment in foreign operations	(987)	(1,080)

There are no balances in the cash flow hedge reserve arising from hedging relationships for which hedge accounting is no longer applied.

				2018
Hedging instruments	Average exchange rate	Foreign currency	Notional value £m	Carrying value £m
Cash flow hedges				
Foreign exchange contracts				
Buy foreign currency:				
3 to 6 months	1.13	EUR	26	1
Sell foreign currency:				
Over 6 months	96.40	INR	1,783	(56)
			1,809	(55)
Net investment hedges				
Foreign exchange contracts				
Sell foreign currency:				
Less than 3 months	1.11	EUR	6,933	(40)
Over 6 months	1.11	EUR	383	(4)
Borrowings (including cross currency interest rate swaps):				
Over 6 months		EUR	8,155	(8,213)
			15,471	(8,257)

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43. Financial instruments and related disclosures continued

		2018
Hedged items	Periodic change in value for calculating hedge ineffectiveness £m	Cumulative balance in cash flow hedge reserve/foreign currency translation reserve for continuing hedges £m
Cash flow hedges Variability in cash flows from a highly probable forecast transaction	56	(49)
Variability in cash flows from foreign exchange exposure arising on Euro denominated coupon payments relating to debt issued	(1)	1
Net investment hedges Net investment in European foreign operations	286	(2,067)

There are no balances in the cash flow hedge reserve arising from hedging relationships for which hedge accounting is no longer applied.

The following table details the effectiveness of the hedging relationships and the amounts reclassified from the hedging reserve to profit or loss:

						2019
				An	I to profit or loss	
	Hedging gains/(losses) recognised in reserves	Amount of hedge ineffectiveness recognised in profit or loss £m	Line item in profit or loss in which hedge ineffectiveness is included	Hedged future cash flows no longer expected to occur	As hedged item affects profit or loss £m	Line item in which reclassification adjustment is included
Cash flow hedges						
Variability in cash flows from a highly probable forecast transaction	-	(7)	Other operating income/ (expense)	-	-	Other operating income/ (expense)
Variability in cash flows from foreign exchange exposure arising on Euro denominated coupon payments relating to debt issued	1	-	Finance income/ (expense)	-	_	Finance income/ (expense)
Net investment hedges						
Net investment in foreign operations	987	-	Finance income/ (expense)	-	-	Finance income/ (expense)

The following table details the effectiveness of the hedging relationships and the amounts reclassified from the hedging reserve to profit or loss:

						2018
				An	nount reclassified	I to profit or loss
	Hedging gains/(losses) recognised in reserves	Amount of hedge ineffectiveness recognised in profit or loss £m	Line item in profit or loss in which hedge ineffectiveness is included	Hedged future cash flows no longer expected to occur	As hedged item affects profit or loss £m	Line item in which reclassification adjustment is included
Cash flow hedges						
Variability in cash flows from a highly probable forecast transaction	127	-	Other operating income/ (expense)	-	(176)	Other operating income/ (expense)
Variability in cash flows from foreign exchange exposure arising on Euro denominated coupon payments relating to debt issued	1	-	Finance income/ (expense)	-	_	Finance income/ (expense)
Net investment hedges						
Net investment in European foreign operations	(286)	-	Finance income/ (expense)	_	-	Finance income/ (expense)

43. Financial instruments and related disclosures continued

Interest rate risk

The Group manages its cash flow interest rate risk by using floating-to-fixed interest rate swaps, where at quarterly intervals the difference between fixed contract rates and floating rate interest amounts calculated by reference to the agreed notional principal amounts are exchanged.

The interest rate swap contracts, exchanging floating rate interest for fixed interest, have been designated as cash flow hedges to hedge the variability of the interest cash flows associated with floating rate debt relating to notes issued under the Group's European Medium Term Note programme. The interest rate swaps and the interest payments on the loan occur simultaneously and the amount accumulated in equity is reclassified to profit or loss over the period that the floating rate interest payments affect profit or loss.

The critical terms of the interest rate swap contracts and their corresponding hedged items are the same. A qualitative assessment of effectiveness is performed and it is expected that the value of the interest rate swap contracts and the value of the corresponding hedged items will systematically change in opposite directions in response to movements in the underlying interest rates. The main sources of ineffectiveness in these hedge relationships are the effects of the Group's own credit risk on the fair value of the interest rate swap contracts, which are not reflected in the fair value of the hedged item attributable to the change in interest rates. No other sources of ineffectiveness emerged from these hedging relationships.

The following tables provide information regarding interest rate swap contracts outstanding and the related hedged items at 31 December 2019 and 31 December 2018. Interest rate swap contract assets and liabilities are presented in the line 'Derivative financial instruments' (either as assets or liabilities) on the Consolidated balance sheet.

mancial instruments (either as assets or liabilities) on the Consolidated balance s	sneet.			
				2019
Hedging instruments	Average contracted fixed rate %	Notional principal value £m		Fair value assets/ (liabilities) £m
Less than 1 year	0.11	637	_	(1)
1 to 2 years	0.13	1,418	(6)	
				2019
			used for calculating hedge ineffectiveness	Balance in cash flow hedge reserve for continuing hedges
Hedged items			£m	£m
Variable rate borrowings			6	4
			Change in fair value for	2018
Hedging instruments	Average contracted fixed rate %	Notional principal value £m	recognising hedge ineffectiveness	Fair value assets/ (liabilities) £m
1 to 2 years	0.11	676	_	(1)
2 to 5 years	0.16	591	_	23
				2018
Hedged items			Change in value used for calculating hedge ineffectiveness	Balance in cash flow hedge reserve for continuing hedges
Variable rate borrowings			3	(3)

43. Financial instruments and related disclosures continued

The following table details the effectiveness of the hedging relationships and the amounts reclassified from the hedging reserve to profit or loss:

						2019
				Am	ount reclassified	I to profit or loss
	Hedging gains/(losses) recognised in reserves £m	Amount of hedge ineffectiveness recognised in profit or loss £m	Line item in profit or loss in which hedge ineffectiveness is included	Hedged future cash flows no longer expected to occur	As hedged item affects profit or loss £m	Line item in which reclassification adjustment is included
Cash flow hedges						
Variability in cash flows	(7)	-	Finance income/ (expense)	-	(2)	Finance income/ (expense)
Pre-hedging of long-term interest rates	(12)	-	Finance income/ (expense)	-	3	Finance income/ (expense)

						2018	
				Am	Amount reclassified		
	Hedging gains/(losses) recognised in reserves £m	Amount of hedge ineffectiveness recognised in profit or loss £m	Line item in profit or loss in which hedge ineffectiveness is included	Hedged future cash flows no longer expected to occur	As hedged item affects profit or loss £m	Line item in which reclassification adjustment is included	
Cash flow hedges							
Variability in cash flows	(3)	-	Finance income/ (expense)	-	(2)	Finance income/ (expense)	
Pre-hedging of long-term interest rates	15	-	Finance income/ (expense)	-	3	Finance income/ (expense)	

(e) Offsetting of financial assets and liabilities

Financial assets and liabilities are offset and the net amount reported in the balance sheet where there is a legally enforceable right to offset the recognised amounts, and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. There are also arrangements that do not meet the criteria for offsetting but still allow for the related amounts to be offset in certain circumstances, such as bankruptcy or the termination of a contract.

The following tables set out the financial assets and liabilities that are offset, or subject to enforceable master netting arrangements and other similar agreements but not offset, as at 31 December 2019 and 31 December 2018. The column 'Net amount' shows the impact on the Group's balance sheet if all offset rights were exercised.

At 31 December 2019	Gross financial assets/ (liabilities)	Financial (liabilities)/ assets offset	Net financial assets/ (liabilities)	Related amounts not offset	Net amount
Financial assets	£m_	£m	£m	£m	£m
	0.040	(4)	0.040	(00)	0.400
Trade and other receivables	6,246	(4)	6,242	(62)	6,180
Derivative financial instruments	524	_	524	(131)	393
Financial liabilities					
Trade and other payables	(14,181)	4	(14,177)	62	(14,115)
Derivative financial instruments	(189)	_	(189)	131	(58)

43. Financial instruments and related disclosures continued

	Gross	Financial			
	financial	(liabilities)/	Net financial	Related	
	assets/	assets	assets/	amounts not	Net
	(liabilities)	offset	(liabilities)	offset	balance
At 31 December 2018	£m	£m	£m	£m	£m
Financial assets					
Trade and other receivables	5,568	_	5,568	(37)	5,531
Derivative financial instruments	257	_	257	(62)	195
Financial liabilities					
Trade and other payables	(13,338)	_	(13,338)	37	(13,301)
Derivative financial instruments	(128)	-	(128)	62	(66)

Amounts which do not meet the criteria for offsetting on the balance sheet but could be settled net in certain circumstances principally relate to derivative transactions under ISDA (International Swaps and Derivatives Association) agreements where each party has the option to settle amounts on a net basis in the event of default of the other party. As there is presently not a legally enforceable right of offset, these amounts have not been offset in the balance sheet, but have been presented separately in the table above.

(f) Debt interest rate repricing table

The following table sets out the exposure of the Group to interest rates on debt, including commercial paper. The maturity analysis of fixed rate debt is stated by contractual maturity and of floating rate debt by interest rate repricing dates. For the purpose of this table, debt is defined as all classes of borrowings other than lease liabilities.

	2019	2018
	Total debt £m	Total £m
Floating and fixed rate debt less than one year	(6,678)	(5,769)
Between one and two years	(3,235)	(1,757)
Between two and three years	(2,643)	(1,570)
Between three and four years	(2,308)	(1,568)
Between four and five years	(1,595)	(2,010)
Between five and ten years	(5,904)	(5,833)
Greater than ten years	(6,895)	(7,489)
Total	(29,258)	(25,996)
Original issuance profile:		
Fixed rate interest	(21,763)	(20,322)
Floating rate interest	(7,495)	(5,635)
Total interest bearing	(29,258)	(25,957)
Non-interest bearing	_	(39)
	(29,258)	(25,996)

43. Financial instruments and related disclosures continued

(g) Sensitivity analysis

The tables below illustrate the estimated impact on the income statement and equity as a result of hypothetical market movements in foreign exchange and interest rates in relation to the Group's financial instruments. The range of variables chosen for the sensitivity analysis reflects management's view of changes which are reasonably possible over a one-year period.

Foreign exchange sensitivity

The Group operates internationally and is primarily exposed to foreign exchange risk in relation to Sterling against movements in US Dollar, Euro and Japanese Yen. Foreign exchange risk arises from the translation of financial assets and liabilities which are not in the functional currency of the entity that holds them. Based on the Group's net financial assets and liabilities as at 31 December, a weakening and strengthening of Sterling against these currencies, with all other variables held constant, is illustrated in the tables below. The tables exclude financial instruments that expose the Group to foreign exchange risk where this risk is fully hedged with another financial instrument.

	Increase/(decrease) in	Increase/(decrease) in
Income statement impact of non-functional currency foreign exchange exposures	income £m	income £m
10 cent appreciation of the US Dollar	3	36
10 cent appreciation of the Euro	(29)	(7)
10 yen appreciation of the Yen	_	15
	2019	2018
	Increase/(decrease) in	Increase/(decrease) in
Income statement impact of non-functional currency foreign exchange exposures	income £m	income £m
10 cent depreciation of the US Dollar	(3)	(30)
10 cent depreciation of the Euro	25	6
10 yen depreciation of the Yen	_	(13)

The equity impact, shown below, for foreign exchange sensitivity relates to derivative and non-derivative financial instruments hedging the Group's net investments in its European (Euro) foreign operations and cash flow hedges of its foreign exchange exposure arising on Euro denominated coupon payments relating to notes issued under the Group's European Medium Term Note programme.

	2019	2018
	Increase/(decrease)	Increase/(decrease)
	in equity	in equity
Equity impact of non-functional currency foreign exchange exposures	£m	£m
10 cent appreciation of the Euro	(1,561)	(1,307)
	2019	2018
	Increase/(decrease)	Increase/(decrease)
	in equity	in equity
Equity impact of non-functional currency foreign exchange exposures	£m	£m
10 cent depreciation of the Euro	1,316	1,091

43. Financial instruments and related disclosures continued

The tables below present the Group's sensitivity to a weakening and strengthening of Sterling against the relevant currency based on the composition of net debt as shown in Note 29 adjusted for the effects of foreign exchange derivatives that are not part of net debt but affect future foreign currency cash flows.

	2019	2018
Impact of foreign exchange movements on net debt	(Increase)/decrease in net debt £m	(Increase)/decrease in net debt £m
10 cent appreciation of the US Dollar	(1,051)	(714)
10 cent appreciation of the Euro	74	(60)
10 yen appreciation of the Yen	(5)	15
	2019	2018
Impact of foreign exchange movements on net debt	(Increase)/decrease in net debt £m	(Increase)/decrease in net debt £m
10 cent depreciation of the US Dollar	903	610
10 cent depreciation of the Euro	(63)	50
10 yen depreciation of the Yen	5	(13)

Interest rate sensitivity

The Group is exposed to interest rate risk on its outstanding borrowings and investments where any changes in interest rates will affect future cash flows or the fair values of financial instruments.

The majority of debt is issued at fixed interest rates and changes in the floating rates of interest do not significantly affect the Group's net interest charge, although the majority of cash and liquid investments earn floating rates of interest.

The table below hypothetically shows the Group's sensitivity to changes in interest rates in relation to Sterling, US Dollar and Euro floating rate financial assets and liabilities. If the interest rates applicable to floating rate financial assets and liabilities were to have increased by 1% (100 basis points), and assuming other variables had remained constant, it is estimated that the Group's finance income for 2019 would have decreased by approximately £9 million (2018 – £13 million decrease). A 1% (100 basis points) movement in interest rates is not deemed to have a material effect on equity.

	2019	2018
	Increase/(decrease) in income	Increase/(decrease) in income
Income statement impact of interest rate movements	£m	£m
1% (100 basis points) increase in Sterling interest rates	14	(2)
1% (100 basis points) increase in US Dollar interest rates	(4)	1
1% (100 basis points) increase in Euro interest rates	(19)	(12)

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43. Financial instruments and related disclosures continued

(h) Contractual cash flows for non-derivative financial liabilities and derivative instruments

The following tables provide an analysis of the anticipated contractual cash flows including interest payable for the Group's non-derivative financial liabilities on an undiscounted basis. For the purpose of this table, debt is defined as all classes of borrowings except for lease liabilities. Interest is calculated based on debt held at 31 December without taking account of future issuance. Floating rate interest is estimated using the prevailing interest rate at the balance sheet date. Cash flows in foreign currencies are translated using spot rates at 31 December.

At 31 December 2019	Debt £m	Interest on debt £m	Lease liabilities £m	charge on lease liabilities £m	and other liabilities not in net debt £m	Total £m
Due in less than one year	(6,678)	(780)	(240)	(41)	(14,952)	(22,691)
Between one and two years	(3,232)	(742)	(227)	(36)	(912)	(5,149)
Between two and three years	(2,651)	(667)	(119)	(30)	(806)	(4,273)
Between three and four years	(2,318)	(600)	(105)	(23)	(835)	(3,881)
Between four and five years	(1,607)	(559)	(93)	(19)	(799)	(3,077)
Between five and ten years	(5,946)	(2,276)	(296)	(52)	(3,131)	(11,701)
Greater than ten years	(6,976)	(3,328)	(170)	(22)	(984)	(11,480)
Gross contractual cash flows	(29,408)	(8,952)	(1,250)	(223)	(22,419)	(62,252)

Contractual cash flows in respect of operating lease vacant space provisions at 31 December 2018 are excluded from the table below.

At 31 December 2018	Debt £m	Interest on debt £m	Obligations under finance leases £m	Finance charge on obligations under finance leases £m	and other liabilities not in net debt £m	Total £m
Due in less than one year	(5,771)	(714)	(24)	(5)	(14,278)	(20,792)
Between one and two years	(1,775)	(708)	(18)	(2)	(1,107)	(3,610)
Between two and three years	(1,592)	(675)	(11)	(2)	(902)	(3,182)
Between three and four years	(1,592)	(620)	(6)	(1)	(851)	(3,070)
Between four and five years	(1,970)	(567)	(3)	(1)	(826)	(3,367)
Between five and ten years	(5,875)	(2,370)	(6)	(5)	(3,748)	(12,004)
Greater than ten years	(7,579)	(3,764)	_	_	(1,468)	(12,811)
Gross contractual cash flows	(26,154)	(9,418)	(68)	(16)	(23,180)	(58,836)

Anticipated contractual cash flows for the repayment of debt and debt interest have increased by £2.8 billion over the year primarily due to funding of the acquisition of Tesaro.

The table below provides an analysis of the anticipated contractual cash flows for the Group's derivative instruments excluding equity options which do not give rise to cash flows, and other embedded derivatives, which are not material, using undiscounted cash flows. Cash flows in foreign currencies are translated using spot rates at 31 December. The gross cash flows of foreign exchange contracts are presented for the purpose of this table although, in practice, the Group uses standard settlement arrangements to reduce its liquidity requirements on these instruments.

Cash flows on interest rate swaps are not shown in the table below as they are not significant.

				2019				2018
	Gross	cash inflows	Gross	cash ouflows	Gros	ss cash inflows	Gross	cash outflows
	Cross currency interest rate swaps £m	Foreign exchange forward contracts and swaps	Cross currency interest rate swaps £m	Foreign exchange forward contracts and swaps £m	Cross currency interest rate swaps £m	Foreign exchange forward contracts and swaps £m	Cross currency interest rate swaps £m	Foreign exchange forward contracts and swaps
Due in less than one year	33	33,273	(2)	(33,290)	49	26,680	(3)	(26,802)
Between one and two years	1,529	_	(1,430)	_	48	_	(2)	-
Between two and three years	_	-	-	_	1,599	_	(1,515)	-
Gross contractual cash flows	1,562	33,273	(1,432)	(33,290)	1,696	26,680	(1,520)	(26,802)

The amounts in Gross cash inflows and outflows under Foreign exchange forward contracts and swaps in less than one year have increased compared with 31 December 2018 predominantly from increased levels of net investment hedging and hedging increased levels of external and internal commercial paper balances.

44. Employee share schemes

GSK operates several employee share schemes, including the Share Value Plan, whereby awards are granted to employees to acquire shares or ADS in GlaxoSmithKline plc at no cost after a three year vesting period and the Performance Share Plan, whereby awards are granted to employees to acquire shares or ADS in GlaxoSmithKline plc at no cost, subject to the achievement by the Group of specified performance targets. The granting of these restricted share awards has replaced the granting of options to employees as the cost of the schemes more readily equates to the potential gain to be made by the employee. The Group also operates savings related share option schemes, whereby options are granted to employees to acquire shares in GlaxoSmithKline plc at a discounted price.

Grants of restricted share awards are normally exercisable at the end of the three-year vesting or performance period. Awards are normally granted to employees to acquire shares or ADS in GlaxoSmithKline plc but in some circumstances may be settled in cash. Grants under savings-related share option schemes are normally exercisable after three years' saving. In accordance with UK practice, the majority of options under the savings-related share option schemes are granted at a price 20% below the market price ruling at the date of grant. Options under historical share option schemes were granted at the market price ruling at the date of grant.

The total charge for share-based incentive plans in 2019 was £432 million (2018 – £393 million; 2017 – £347 million). Of this amount, £302 million (2018 – £304 million; 2017 – £276 million) arose from the Share Value Plan. See Note 9, 'Employee Costs' for further details.

GlaxoSmithKline share award schemes

Share Value Plan

Under the Share Value Plan, share awards are granted to certain employees at no cost. The awards vest after two and a half to three years and there are no performance criteria attached. The fair value of these awards is determined based on the closing share price on the day of grant, after deducting the expected future dividend yield of 4.2% (2018 – 4.8%; 2017 – 4.8%) over the duration of the award.

Number of shares and ADS issuable	Shares Number (000)	Weighted fair value	ADS Number (000)	Weighted fair value
At 1 January 2017	32,855		17,083	
Awards granted	13,018	£13.68	6,610	\$35.63
Awards exercised	(10,596)		(5,674)	
Awards cancelled	(1,352)		(627)	
At 31 December 2017	33,925		17,392	
Awards granted	12,751	£13.74	6,503	\$35.28
Awards exercised	(11,089)		(5,583)	
Awards cancelled	(1,519)		(925)	
At 31 December 2018	34,068		17,387	
Awards granted	12,814	£15.85	7,008	\$37.90
Awards exercised	(11,709)		(6,079)	
Awards cancelled	(1,704)		(976)	
At 31 December 2019	33,469		17,340	

Performance Share Plan

Under the Performance Share Plan, share awards are granted to Directors and senior executives at no cost. The percentage of each award that vests is based upon the performance of the Group over a defined measurement period with dividends reinvested during the same period. For awards granted from 2015, the performance conditions are based on three equally weighted measures over a three-year performance period. These are adjusted free cash flow, TSR and R&D new product performance.

The fair value of the awards is determined based on the closing share price on the day of grant. For TSR performance elements, this is adjusted by the likelihood of that condition being met, as assessed at the time of grant.

During 2019, awards were made of 3.8 million shares at a weighted fair value of £12.40 and 1.4 million ADS at a weighted fair value of \$32.41. At 31 December 2019, there were outstanding awards over 12.0 million shares and 3.6 million ADS.

44. Employee share schemes continued

Share options and savings-related options

For the purposes of valuing savings-related options to arrive at the share-based payment charge, a Black-Scholes option pricing model has been used. The assumptions used in the model are as follows:

	2019 Grant	2018 Grant	2017 Grant
Risk-free interest rate	0.44%	0.76%	0.54%
Dividend yield	4.5%	5.3%	5.9%
Volatility	22%	21%	23%
Expected life	3 years	3 years	3 years
Savings-related options grant price (including 20% discount)	£14.15	£12.09	£10.86

Options outstanding	Share option schemes – shares		Share option schemes – ADS			
	Number 000	Weighted exercise price	Number 000	Weighted exercise price	Number 000	Weighted exercise price
At 31 December 2019	337	£12.04	290	\$37.21	6,016	£12.21
Range of exercise prices on options outstanding at year end	£12.04	- £12.04	\$36.63	- \$37.32	£10.13	- £14.15
Weighted average market price on exercise during year		£16.13		\$41.10		£15.60
Weighted average remaining contractual life		0.2 years		0.2 years		2.1 years

Options over 1.0 million shares were granted during the year under the savings-related share option scheme at a weighted average fair value of £3.00. At 31 December 2019, 5.3 million of the savings-related share options were not exercisable. All of the other share options and ADS options are currently exercisable and all will expire if not exercised on or before 22 July 2020.

There has been no change in the effective exercise price of any outstanding options during the year.

Employee Share Ownership Plan Trusts

The Group sponsors Employee Share Ownership Plan (ESOP) Trusts to acquire and hold shares in GlaxoSmithKline plc to satisfy awards made under employee incentive plans and options granted under employee share option schemes. The trustees of the ESOP Trusts purchase shares with finance provided by the Group by way of loans or contributions. The costs of running the ESOP Trusts are charged to the income statement. Shares held by the ESOP Trusts are deducted from other reserves and amortised down to the value of proceeds, if any, receivable from employees on exercise by a transfer to retained earnings. The trustees have waived their rights to dividends on the shares held by the ESOP Trusts.

Shares held for share award schemes	2019	2018
Number of shares (000)	36,225	41,391
	£m	£m
Nominal value	9	10
Carrying value	134	160
Market value	645	617
Shares held for share option schemes	2019	2018
Number of shares (000)	139	139
	£m	£m
Nominal value	-	-
Carrying value	1	1
Market value	2	2

45. Principal Group companies

The following represent the principal subsidiaries and their countries of incorporation of the Group at 31 December 2019. The equity share capital of these entities is wholly owned by the Group except where its percentage interest is shown otherwise. All companies are incorporated in their principal country of operation except where stated.

England	US
Glaxo Group Limited	Block Drug Company, Inc. (68%)
Glaxo Operations UK Limited	Corixa Corporation
GlaxoSmithKline Capital plc	GlaxoSmithKline Capital Inc.
GlaxoSmithKline Consumer Healthcare Holdings Limited*	GlaxoSmithKline Consumer Healthcare Holdings (US) LLC (68%)
GlaxoSmithKline Consumer Healthcare (UK) Trading Limited (68%)	GlaxoSmithKline Consumer Healthcare, L.P. (59.84%)
GlaxoSmithKline Export Limited	GlaxoSmithKline Holdings (Americas) Inc.
GlaxoSmithKline Finance plc	GlaxoSmithKline LLC
GlaxoSmithKline Holdings Limited *	Human Genome Sciences, Inc.
GlaxoSmithKline Research & Development Limited	GSK Consumer Health, Inc. (68%)
GlaxoSmithKline Services Unlimited *	PF Consumer Healthcare 1 LLC (68%)
GlaxoSmithKline UK Limited	S.R. One, Limited
Setfirst Limited	Stiefel Laboratories, Inc.
SmithKline Beecham Limited	Tesaro, Inc.
ViiV Healthcare Finance Limited (78.3%)	ViiV Healthcare Company (78.3%)
ViiV Healthcare Limited (78.3%)	
ViiV Healthcare UK Limited (78.3%)	

Europe	Others

GlaxoSmithKline Pharmaceuticals SA (Belgium)
GlaxoSmithKline Sante Grand Public SAS (France) (68%)

Laboratoire GlaxoSmithKline (France) ViiV Healthcare SAS (France) (78.3%)

GlaxoSmithKline Consumer Healthcare GmbH & Co. KG (Germany) (68%)

GlaxoSmithKline GmbH & Co. KG (Germany)

GSK Vaccines GmbH (Germany)

GlaxoSmithKline Consumer Healthcare S.p.A. (Italy) (68%)

GlaxoSmithKline S.p.A. (Italy) GSK Vaccines S.r.I. (Italy)

Pfizer Consumer Manufacturing Italy S.r.l. (Italy) (68%)

GSK Services Sp z o.o. (Poland)

GlaxoSmithKline Trading Services Limited (Republic of Ireland) (i)

GlaxoSmithKline Healthcare AO (Russia) (68%)

GlaxoSmithKline S.A. (Spain)

Laboratorios ViiV Healthcare, S.L. (Spain) (78.3%) GSK Consumer Healthcare S.A. (Switzerland) (68%) GlaxoSmithKline Australia Pty Ltd (Australia)

GlaxoSmithKline Consumer Healthcare Australia Pty Ltd (Australia) (68%)

GlaxoSmithKline Brasil Limitada (Brazil)

GlaxoSmithKline Consumer Healthcare Inc. (Canada) (68%)

GlaxoSmithKline Inc. (Canada)

ID Biomedical Corporation of Quebec (Canada)

PF Consumer Healthcare Canada ULC/PF Soins De Sante SRI (Canada) (68%)

GlaxoSmithKline Limited (China (Hong Kong))

Sino-American Tianjin Smith Kline & French Laboratories Ltd (China) (55%)

Wyeth Pharmaceutical Co. Ltd (China) (68%) GlaxoSmithKline Asia Pvt. Limited (India)

GlaxoSmithKline Consumer Healthcare Limited (India) (72.5%) GlaxoSmithKline Pharmaceuticals Limited (India) (75%)

GlaxoSmithKline Consumer Healthcare Japan K.K. (Japan) (68%)

GlaxoSmithKline K.K. (Japan)

ViiV Healthcare Kabushiki Kaisha (Japan) (78.3%) GlaxoSmithKline Pakistan Limited (Pakistan) (82.6%) Glaxo Wellcome Manufacturing Pte Ltd. (Singapore) GlaxoSmithKline Korea Limited (Republic of Korea) GlaxoSmithKline llaclari Sanayi ve Ticaret A.S. (Turkey)

- (i) Exempt from the provisions of section 347 and 348 of the Companies Act 2014 (Ireland), in accordance with the exemptions noted in Section 357 of that Act. Further subsidiaries, as disclosed on pages 299 to 310, are exempt from these provisions as they are also consolidated in the group financial statements.
- * Directly held wholly-owned subsidiary of GlaxoSmithKline plc.

The subsidiaries and associates listed above principally affect the figures in the Group's financial statements. Each of GlaxoSmithKline Capital Inc., GlaxoSmithKline Capital plc and GlaxoSmithKline LLC, is a wholly-owned finance subsidiary of the company, and the company has fully and unconditionally guaranteed the securities issued by each of GlaxoSmithKline Capital Inc., GlaxoSmithKline Capital plc and GlaxoSmithKline LLC.

See pages 299 to 310 for a complete list of subsidiary undertakings, associates and joint ventures, which form part of these financial statements.

Investor information

Notes to the financial statements continued

46. Legal proceedings

The Group is involved in significant legal and administrative proceedings, principally product liability, intellectual property, tax, anti-trust, consumer fraud and governmental investigations. The most significant of these matters, other than tax matters, are described below. The Group makes provision for these proceedings on a regular basis as summarised in Note 2, 'Accounting principles and policies' and Note 31, 'Other provisions'.

The Group may become involved in significant legal proceedings in respect of which it is not possible to make a reliable estimate of the expected financial effect, if any, that could result from ultimate resolution of the proceedings. In these cases, appropriate disclosures about such cases would be included in this note, but no provision would be made for the cases.

With respect to each of the legal proceedings described below, other than those for which a provision has been made, the Group is unable to make a reliable estimate of the expected financial effect at this stage. The Group does not believe that information about the amount sought by the plaintiffs, if that is known, would be meaningful with respect to those legal proceedings. This is due to a number of factors, including, but not limited to, the stage of proceedings, the entitlement of parties to appeal a decision and clarity as to theories of liability, damages and governing law.

Legal expenses incurred and provisions related to legal claims are charged to selling, general and administration costs. Provisions are made, after taking appropriate legal and other specialist advice, where an outflow of resources is considered probable and a reliable estimate can be made of the likely outcome of the dispute. For certain product liability claims, the Group will make a provision where there is sufficient history of claims made and settlements to enable management to make a reliable estimate of the provision required to cover unasserted claims. At 31 December 2019, the Group's aggregate provision for legal and other disputes (not including tax matters described in Note 14, 'Taxation') was £198 million. The ultimate liability for legal claims may vary from the amounts provided and is dependent upon the outcome of litigation proceedings, investigations and possible settlement negotiations.

The Group's position could change over time, and, therefore, there can be no assurance that any losses that result from the outcome of any legal proceedings will not exceed by a material amount the amount of the provisions reported in the Group's financial statements. If this were to happen, it could have a material adverse impact on the results of operations of the Group in the reporting period in which the judgements are incurred or the settlements entered into.

Intellectual property

Intellectual property claims include challenges to the validity and enforceability of the Group's patents on various products or processes as well as assertions of non-infringement of those patents. A loss in any of these cases could result in loss of patent protection for the product at issue. The consequences of any such loss could be a significant decrease in sales of that product and could materially affect future results of operations for the Group.

Dolutegravir/Tivicay/Triumeq/Dovato/Juluca

In September and October 2017, ViiV Healthcare received patent challenge letters under the Hatch-Waxman Act from Cipla, Dr. Reddy's Labs and Apotex for Triumeg and Tivicay; letters from Lupin and Mylan for Triumeq, and a letter from Sandoz for Tivicay. ViiV Healthcare lists two patents in the FDA Orange Book for Tivicay and Triumeq. One patent covers the molecule dolutegravir and expires on 5 October 2027. The second patent claims a crystal form of dolutegravir and expires on 8 December 2029. All the letters challenged only the later-expiring crystal form patent. Several of the generic companies allege only that the crystal form patent is invalid while others claim the crystal form patent is both invalid and not infringed by their proposed products. In 2017, ViiV Healthcare filed patent infringement suits against all six generic companies. The case against Mylan is now proceeding in the Northern District of West Virginia and is set for trial on 21 September 2020. The cases against the other defendants are proceeding in the US District Court for the District of Delaware. The court has yet to set a trial date for those matters

In September 2019, ViiV Healthcare received a paragraph IV letter from Cipla relating to *Dovato* and challenging only the crystal form patent. On 4 November 2019 ViiV Healthcare filed suit against Cipla in the US District Court for the District of Delaware.

In January 2020, ViiV Healthcare received a paragraph IV letter from Lupin relating to *Juluca* and challenging the crystal form patent as well as a patent relating to the combination of dolutegravir and rilpivirine that expires on 24 January 2031. On 28 February 2020 ViiV Healthcare filed suit against Lupin on both patents.

On 7 February 2018, ViiV Healthcare filed patent infringement litigation against Gilead Sciences Inc. (Gilead) over bictegravir in the US District Court for the District of Delaware (U.S. Patent No. 8,129,385) and the Canadian Federal Court (Canadian patent No. 2,606,282). ViiV Healthcare alleged that Gilead's triple combination HIV drug containing the HIV integrase inhibitor bictegravir infringes ViiV Healthcare's patent covering dolutegravir and other compounds that include dolutegravir's unique chemical scaffold. In both the US and Canada, ViiV Healthcare is seeking financial redress rather than injunctive relief.

46. Legal proceedings continued

On 12 July 2019, Gilead filed a motion for judgement on the pleadings in the US case, arguing that as a matter of law its bictegravir compound does not infringe ViiV Healthcare's patent. On 5 February the court denied Gilead's motion. The US case against Gilead is set for trial on 21 September 2020. In the Canadian matter, a four-day summary trial on the issue of infringement was held on 27-30 January 2020. A decision from the Canadian court is expected by the end of March 2020. On 20 November 2019, ViiV Healthcare commenced actions in the UK, France, Germany, Japan, Korea and Australia against Gilead alleging that Gilead's Biktarvy infringes certain of ViiV Healthcare's HIV integrase inhibitor patents.

Kivexa

In June 2017, Biogaran commenced proceedings in France seeking revocation of the French SPC covering *Kivexa*. No trial date has been set for this action.

In Q2 2018, ViiV Healthcare commenced proceedings against Sandoz in Switzerland. Sandoz countered, challenging the validity of the patent relating to *Kivexa*. This matter was settled in Q4 2019.

Product liability

The Group is currently a defendant in a number of product liability lawsuits related to the Group's Pharmaceuticals, Vaccines, and Consumer Healthcare products. The Group has been able to make a reliable estimate of the expected financial effect of the matters discussed in this category and has included a provision, as appropriate, for the matters below in the provision for legal and other disputes. Matters for which the Group has made a provision are also noted in Note 31, 'Other provisions.'

Avandia

As of January 2020, there are three remaining US Avandia cases. Two are class actions brought by third-party payers asserting claims under the Racketeer Influenced and Corrupt Organizations Act (RICO) and state consumer protection laws. In December 2019, the Third Circuit Court of Appeals reversed the summary judgements granted in favour of the Group and remanded the third-party payer cases back to district court. In the third case, the Santa Clara County (California) Action, the parties have reached an agreement to settle all remaining claims.

Additionally, the class action settlement in Canada has now been approved, and all *Avandia* class actions in Canada have been either discontinued or dismissed.

Seroxat/Paxil and Paxil CR

The Group has received numerous lawsuits and claims alleging that use of *Paxil* (paroxetine) has caused a variety of injuries. Most of these lawsuits contain one or more of the following allegations: (i) that use of *Paxil* during pregnancy caused congenital malformations, persistent pulmonary hypertension or autism; (ii) that *Paxil* treatment caused patients to commit suicidal or violent acts; and (iii) that the Group failed to warn that patients could experience certain symptoms on discontinuing *Paxil* treatment.

- Pregnancy

The Group has reached agreements to settle the majority of the US claims relating to the use of *Paxil* during pregnancy as of January 2020, but eleven lawsuits related to use during pregnancy are still pending in various courts in the US.

The Singh action in Alberta, Canada, seeks to certify a national class action relating to birth defects generally. The court heard argument in January 2020 on the plaintiffs' class certification motion but has not yet ruled.

Another Canadian class action, Jensen, alleging claims of *Paxil* (and other SSRI) use and autism was filed in Saskatchewan in January 2017; however, there has been no activity in the case since the filing.

- Acts of violence

As of January 2020, there were six pending claims or cases concerning allegations that patients who took paroxetine or Paxil committed or attempted to commit suicide or acts of violence: five claims or cases are in the US and one case is in Canada. One of the US cases, Dolin, involving the suicide of a man who allegedly took generic paroxetine manufactured by Mylan, resulted in a \$3 million verdict for the plaintiff; however, on 22 August 2018 the US Court of Appeals for the Seventh Circuit reversed the jury verdict and found in favour of the Group. The US Supreme Court then denied plaintiff's certiorari request to review the case. Thereafter, however, the plaintiff filed a motion in the federal district court, asking it to reinstate the jury verdict in light of the US Supreme Court's pre-emption decision in Merck v. Albrecht. The district court denied the plaintiff's motion on 11 July 2019, but the plaintiff appealed that decision to the Seventh Circuit, where oral argument was heard on 22 January 2020. A ruling from the Court of Appeals is pending. The remaining US cases involving claims of violence are largely dormant.

In the one pending Canadian action, Carmichael, the Group filed a motion for summary judgement based on the statute of limitations, which was denied. The Group appealed that ruling, and oral argument took place on 16 December 2019. A ruling has not yet been issued.

Investor information

Notes to the financial statements continued

46. Legal proceedings continued

- Discontinuation

In the UK, a long-pending group action alleges that *Seroxat* caused severe discontinuation symptoms. In 2010, the Legal Services Commission (LSC) withdrew public funding from hundreds of claimants, causing termination of most claims. In 2015, the Legal Aid Agency (formerly the LSC) discharged the public funding certificate following a 2013 recommendation of its Special Cases Review Panel that these cases have poor prospects of success.

However, more recently, Fortitude Law was engaged with the purpose of resurrecting the *Seroxat* group action and obtained third-party funding for the experts and the 103 remaining claimants. The Group asked the court to require the third-party funder to provide security for the litigation costs in the event plaintiffs lose.

On 8 December 2017, the High Court ruled in favour of the Group on its application for an order that the claimants' litigation funder give security for costs for a sum in excess of the total funding it had committed to the case. The trial of the action commenced in April 2019. The judge dismissed the cases on the grounds that the allegations were insufficient to prove the plaintiffs' claims and that the cases were too far advanced to allow plaintiffs to reframe them. The plaintiffs' appeal was heard in late October 2019. On 8 November 2019, the Court of Appeal held in favour of GSK, dismissing the appeal unanimously. On 24 January, the Supreme Court issued an order denying plaintiffs' request to appeal to that court. The case will be sent back to the trial court judge for a determination on whether judgement on these cases now can be entered for GSK.

In addition to the UK matters, there is one individual US discontinuation-type claim pending in the Central District of California. The plaintiff in that matter alleges claims of dystonia/dyskinesia caused by ingestion of *Paxil*. Trial is set for 27 October 2020.

PPI litigation

The Group is a defendant in the ongoing proton pump inhibitor (PPI) litigation, in which plaintiffs allege that their use of PPIs caused serious bodily injuries, including acute kidney injury, chronic kidney disease or end-stage renal failure. As of January 2020, there are approximately 1,900 personal injury lawsuits involving *Prevacid24HR* pending against the Group, nearly all of which are pending in a multi-district litigation (MDL) proceeding in the District of New Jersey. In addition, as part of the consumer business transaction with Pfizer, there are now approximately 2,500 cases involving *Nexium24HR* pending against the Group in the same MDL. A small subset of cases involving both products are also pending in several state courts.

Manufacturers of other PPIs also are named as co-defendants in the MDL. The Group has filed motions to dismiss several hundred cases, but the MDL Court has not yet ruled on those motions. The first PPI bellwether trial is set for November 2021.

Zantac

The Group has been contacted by several regulatory authorities regarding the detection of genotoxic nitrosamine (NDMA) in Zantac (ranitidine) products. Based on the information received to date and correspondence with regulators, the Group made the decision in September 2019 to suspend the release, distribution and supply of all dose forms of Zantac to all markets pending the outcome of the ongoing tests and investigations. Also, as a precautionary action, the Group made the decision in early October 2019 to initiate a voluntary pharmacy/retail level recall of all Zantac products globally. Ranitidine is subject to regulatory scrutiny and the Group is continuing with investigations into the potential source of NDMA. The first Zantac personal injury claim was filed on 15 October 2019 against GSK and several other pharmaceutical companies in US federal court in the Eastern District of California, followed by additional filings, and on 6 February 2020, a multi-district litigation (MDL) proceeding to hear Zantac cases was established in the Southern District of Florida.

Zofran

Plaintiffs allege that their children suffered birth defects as a result of the mothers' ingestion of *Zofran* and/or generic ondansetron for pregnancy-related nausea and vomiting. Plaintiffs assert that the Group sold *Zofran* knowing it was unsafe for pregnant women, failed to warn of the risks, and illegally marketed *Zofran* 'off-label' for use by pregnant women.

As of January 2020, the Group is a defendant in 413 personal injury lawsuits. All but two of the lawsuits are part of a multi-district litigation (MDL) proceeding in US federal court in the District of Massachusetts.

In the wake of the US Supreme Court's pre-emption decision in Merck v. Albrecht, the MDL judge directed GSK to re-file its motion for summary judgment on federal pre-emption grounds.

46. Legal proceedings continued

The Court heard oral argument on GSK's renewed motion on 5 November 2019. Additionally, in response to plaintiffs' claims that FDA would have changed *Zofran*'s labelling had GSK provided certain additional information to FDA, on 1 November 2019, GSK submitted a Citizen Petition to FDA providing the information identified by plaintiffs and requesting that FDA provide guidance on whether such information merits a label change. The Court has deferred the first trial date to 4 May 2020 to allow FDA time to respond to the Petition.

GSK is also a defendant in four proposed class actions in Canada. There has been no significant activity in these matters.

Sales and marketing and regulation

The Group's marketing and promotion of its Pharmaceutical and Vaccine products are the subject of certain governmental investigations and private lawsuits brought by litigants under various theories of law. The Group has been able to make a reliable estimate of the expected financial effect of the matters discussed in this category and has included a provision for such matters in the provision for legal and other disputes, except as noted below.

Matters for which the Group has made a provision are also noted in Note 31, 'Other provisions'.

SFO and SEC/DOJ Anti-corruption enquiries

On 27 May 2014, the UK Serious Fraud Office (SFO) began a formal criminal investigation into the Group's commercial operations in a number of countries, including China. The SFO inquiry followed investigations initiated by China's Ministry of Public Security in June 2013 (the 'China Investigations'). Parallel investigations were undertaken by the US Securities and Exchange Commission (SEC) and the US Department of Justice (DOJ).

While the underlying commercial operations investigations have been resolved, as previously reported, in the course of its inquiry, the SFO had requested additional information from the Group regarding third-party advisers engaged by the company in the course of the China Investigations. The SEC and DOJ are also investigating these matters. The Group is co-operating and responding to these requests. On 22 February 2019, the SFO announced that it had closed its investigation and confirmed that it would be taking no further action against the Group.

The SEC and DOJ investigations into these matters continue.

The Group is unable to make a reliable estimate of the expected financial effect of these investigations, and no provision has been made for them.

Average wholesale price

The Attorney General in Illinois filed suit against the Group and a number of other pharmaceutical companies claiming damages and restitution due to average wholesale price (AWP) and/or wholesale acquisition cost (WAC) price reporting for pharmaceutical products covered by the state's Medicaid programmes. The case alleged that the Group reported or caused to be reported false AWP and WAC prices, which, in turn, allegedly caused the state Medicaid agency to reimburse providers more money for covered medicines than the agency intended. The state sought recovery on behalf of itself as payer and on behalf of in-state patients as consumers. GSK settled the matter with the state as announced in October 2019, thereby concluding the matter.

Cidra third-party payer litigation

On 25 July 2013, 41 major US healthcare insurers filed a lawsuit against the Group, seeking compensation for reimbursements they made for medicines manufactured between 2000 and 2006 at the Group's former Cidra plant in Puerto Rico. The insurers claimed that the Group knowingly marketed and sold adulterated drugs manufactured under conditions non-compliant with cGMP (current good manufacturing practices) and that they, as third-party insurers, were unlawfully induced to pay for them. In November 2019, the Group resolved the lawsuit and reached a settlement with all plaintiffs, thereby concluding the matter.

Investor information

Notes to the financial statements continued

46. Legal proceedings continued

Anti-trust/competition

Certain governmental actions and private lawsuits have been brought against the Group alleging violation of competition or anti-trust laws. The Group has been able to make a reliable estimate of the expected financial effect of the matters discussed in this category and has included a provision for such matters in the provision for legal and other disputes, except as noted below.

Matters for which the Group has made a provision are also noted in Note 31, 'Other provisions'.

UK Competition and Markets Authority investigation
On 12 February 2016, the UK Competition and Markets
Authority (CMA) issued a decision fining the Group
£37.6 million for infringement of the Competition Act, in
connection with agreements to settle patent disputes the
Group entered into in 2001 and 2002 with potential suppliers
of generic paroxetine formulations. The Group appealed to the
Competition Appeal Tribunal (CAT), which delivered its initial
judgement upholding the fine on 8 March 2018 but referred
certain questions of law to the European Union Court of Justice
(ECJ). On 30 January 2020, the ECJ issued its judgement
endorsing the criteria used by the CMA in levying the fine,
and the matter now will return to the CAT for entry of a final
judgement.

Lamictal

Purported classes of direct and indirect purchasers filed suit in the US District Court for the District of New Jersey alleging that the Group and Teva Pharmaceuticals unlawfully conspired to delay generic competition for *Lamictal*, resulting in overcharges to the purchasers, by entering into an allegedly anti-competitive reverse payment settlement to resolve patent infringement litigation. A separate count accuses the Group of monopolising the market.

On 26 June 2015, the Court of Appeals reversed the trial court's decision to dismiss the case and remanded the action back to the trial court. On 18 May 2016, the trial court denied the indirect purchaser class plaintiffs' motion for reconsideration of the Court's dismissal of their claims. As a result, the indirect purchaser class representatives agreed to a settlement to exit the case and resolve their remaining claims. On 13 December 2018, the trial judge granted plaintiffs' class certification motion, certifying a class of direct purchasers in this action. The Group is pursuing an appeal with the Court of Appeals regarding the class certification. On 18 March 2019, the Third Circuit Court of Appeals granted the Group's motion agreeing to review the class certification decision. Briefing for the appeal has concluded. Oral argument is expected to occur in March 2020.

Commercial and corporate

The Group is a defendant in certain cases which allege violations of US federal securities and ERISA laws. The Group has been able to make a reliable estimate of the expected financial effect of the matters discussed in this category and has included a provision for such matters in the provision for legal and other disputes. Matters for which the Group has made a provision are also noted in Note 31, 'Other provisions'.

Securities/ERISA class actions - Stiefel

On 12 December 2011, the US Securities and Exchange Commission (SEC) filed a formal complaint against Stiefel Laboratories, Inc., and Charles Stiefel in the US District Court for the District of Florida, alleging that Stiefel and its principals violated federal securities laws by inducing Stiefel employees to sell their shares in the employee stock plan back to the company at a greatly undervalued price and without disclosing to employees that the company was about to be sold to the Group. After several years of inactivity, the case was re-assigned to a new judge, who set a trial date of 6 July 2020. On 26 February 2020, the parties reached an agreement in principle to settle the case, which is subject to final approval by the SEC.

In addition to the SEC case, one private matter (the Martinolich case) remains. It is also pending in federal district court in Florida but has been stayed pending the trial of the SEC matter. The allegations in the Martinolich case largely track those in the SEC matter: the plaintiff, a former Stiefel employee, alleges that Stiefel and its officers and directors violated the US Employee Retirement Income Security Act (ERISA) and federal and state securities laws by inducing Stiefel employees to sell their shares in the employee stock plan back to Stiefel at a greatly undervalued price and without disclosing to employees that Stiefel was about to be sold to the Group.

Company balance sheet - UK GAAP

(including FRS 101 'Reduced Disclosure Framework') as at 31 December 2019

	Notes	2019 £m	2019 £m	2018 £m	2018 £m
Fixed assets – investments	E		54,854		19,987
Current assets:					
Trade and other receivables	F		2,210		8,394
Cash at bank			12		12
Total current assets			2,222		8,406
Bank overdrafts			_		(12)
Short term borrowings	G		(1,000)		(3,500)
Trade and other payables	Н		(609)		(610)
Total current liabilities			(1,609)		(4,122)
Net current assets			613		4,284
Total assets less current liabilities			55,467		24,271
Provisions for liabilities	1		(4)		(16)
Other non-current liabilities	J		(317)		(282)
Net assets			55,146		23,973
Capital and reserves					
Share capital	K		1,346		1,345
Share premium account	K		3,174		3,091
Other reserves			1,420		1,420
Retained earnings:					
At 1 January		18,117		22,106	
Loss for the year		(53)		(62)	
Other changes in retained earnings		31,142		(3,927)	
	L		49,206		18,117
Equity shareholders' funds			55,146		23,973

The financial statements on pages 252 to 256 were approved by the Board on 3 March 2020 and signed on its behalf by

Sir Jonathan Symonds

Chairman

 ${\sf GlaxoSmithKline\ plc}$

Registered number: 3888792

Company statement of changes in equity

for the year ended 31 December 2019

	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Total equity £m
At 1 January 2018	1,343	3,019	1,420	22,106	27,888
Loss and Total comprehensive expense attributable to shareholders	-	_	_	(62)	(62)
Dividends to shareholders	-	_	_	(3,927)	(3,927)
Shares issued under employee share schemes	2	72	_	_	74
At 31 December 2018	1,345	3,091	1,420	18,117	23,973
Loss for the year	-	_	_	(53)	(53)
Distribution received of GlaxoSmithKline Consumer Healthcare Holdings Limited	-	-	-	34,800	34,800
Total comprehensive income for the year	_	_	-	34,747	34,747
Dividends to shareholders	_	_	_	(3,953)	(3,953)
Shares issued under employee share schemes	1	50	_	_	51
Treasury shares transferred to the ESOP Trusts	-	33	-	295	328
At 31 December 2019	1,346	3,174	1,420	49,206	55,146

Investor information

Notes to the company balance sheet – UK GAAP (including FRS 101 'Reduced Disclosure Framework')

A) Presentation of the financial statements

Description of business

GlaxoSmithKline plc is the parent company of GSK, a major global healthcare group which is engaged in the creation and discovery, development, manufacture and marketing of pharmaceutical products, including vaccines, over-the-counter (OTC) medicines and health-related consumer products.

Preparation of financial statements

The financial statements, which are prepared using the historical cost convention (as modified to include the revaluation of certain financial instruments) and on a going concern basis, are prepared in accordance with Financial Reporting Standard 101 'Reduced Disclosure Framework' and with UK accounting presentation and the Companies Act 2006 as at 31 December 2019, with comparative figures as at 31 December 2018.

As permitted by section 408 of the Companies Act 2006, the income statement of the company is not presented in this Annual Report.

The company is included in the Group financial statements of GlaxoSmithKline plc, which are publicly available.

The following exemptions from the requirements of IFRS have been applied in the preparation of these financial statements, in accordance with FRS 101:

- Paragraphs 45(b) and 46 to 52 of IFRS 2, 'Share-based payment'
- IFRS 7, 'Financial Instruments Disclosures'
- Paragraphs 91-99 of IFRS 13, 'Fair value measurement'
- Paragraph 38 of IAS 1, 'Presentation of financial statements' comparative information requirements in respect of paragraph 79(a) (iv) of IAS 1
- Paragraphs 10(d), 10(f), 16, 38(A), 38 (B to D), 40 (A to D),
 111 and 134 to 136 of IAS 1, 'Presentation of financial statements'
- IAS 7, 'Statement of cash flows'
- Paragraph 30 and 31 of IAS 8, 'Accounting policies, changes in accounting estimates and errors'
- Paragraph 17 of IAS 24, 'Related party disclosures' and the further requirement in IAS 24 to disclose related party transactions entered into between two or more members of a Group.

Accounting convention and standards

The balance sheet has been prepared using the historical cost convention and complies with applicable UK accounting standards.

Accounting principles and policies

The preparation of the balance sheet in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the balance sheet. Actual amounts could differ from those estimates.

The balance sheet has been prepared in accordance with the company's accounting policies approved by the Board and described in Note B. These policies have been consistently applied, unless otherwise stated.

Key accounting judgements and estimates

No key accounting judgements or estimates were required in the current year.

B) Accounting policies

Foreign currency transactions

Foreign currency transactions are recorded at the exchange rate ruling on the date of transaction. Foreign currency assets and liabilities are translated at rates of exchange ruling at the balance sheet date.

Dividends paid and received

Dividends paid and received are included in the financial statements in the period in which the related dividends are actually paid or received.

Expenditure

Expenditure is recognised in respect of goods and services received when supplied in accordance with contractual terms. Provision is made when an obligation exists for a future liability in respect of a past event and where the amount of the obligation can be reliably estimated.

Investments in subsidiary companies

Investments in subsidiary companies are held at cost less any provision for impairment and also adjusted for movements in contingent consideration.

Impairment of investments

The carrying value of investments are reviewed for impairment when there is an indication that the investment might be impaired. Any provision resulting from an impairment review is charged to the income statement in the year concerned.

Share-based payments

The issuance by the company to its subsidiaries of a grant over the company's shares, represents additional capital contributions by the company in its subsidiaries. An additional investment in subsidiaries results in a corresponding increase in shareholders' equity. The additional capital contribution is based on the fair value of the grant issued, allocated over the underlying grant's vesting period.

Notes to the company balance sheet - UK GAAP

(including FRS 101 'Reduced Disclosure Framework') continued

Taxation

Current tax is provided at the amounts expected to be paid applying tax rates that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred tax assets are only recognised to the extent that they are considered recoverable against future taxable profits.

Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the temporary differences are expected to be realised or settled. Deferred tax liabilities and assets are not discounted.

Financial guarantees

Liabilities relating to guarantees issued by the company on behalf of its subsidiaries are initially recognised at fair value and amortised over the life of the guarantee.

C) Operating profit

A fee of £12,000 (2018 – £12,000) relating to the audit of the company has been charged in operating profit.

The directors declared four interim dividends resulting in a dividend for the year of 80 pence, in line with the dividend for 2018. For further details, see Note 16 to the Group financial statements, 'Dividends'.

E) Fixed assets - investments

	2019 £m	2018 £m
Shares in GlaxoSmithKline Services Unlimited	637	613
Shares in GlaxoSmithKline Holdings (One) Limited	18	18
Shares in GlaxoSmithKline Holdings Limited	17,888	17,888
Shares in GlaxoSmithKline Consumer Healthcare Holdings Limited	34,800	_
Shares in GlaxoSmithKline Mercury Limited	33	33
	53,376	18,552
Capital contribution relating to share-based payments	1,139	1,139
Contribution relating to contingent consideration	339	296
	54,854	19,987

The shares in GlaxoSmithKline Consumer Healthcare Holdings Limited were received during the year as a dividend in specie as part of a Group reorganisation prior to the acquisition of the Pfizer consumer healthcare business.

F) Trade and other receivables

	2019 £m	2018 £m
Amounts due within one year:		
UK Corporation tax recoverable	14	10
Amounts owed by Group undertakings	1,645	7,889
	1,659	7,899
Amounts due after more than one year:		
Amounts owed by Group undertakings	551	495
	2,210	8,394

Investor information

Notes to the company balance sheet - UK GAAP

(including FRS 101 'Reduced Disclosure Framework') continued

G) Short-term borrowings

The £1 billion borrowing at 31 December 2019 relates to the balance of a facility taken out in June 2018 as part of the financing of the buyout of the non-controlling interest in the Consumer Healthcare Joint Venture held by Novartis. The maturity date of the remaining borrowing is now 1 June 2020.

H) Trade and other payables

	2019 £m	2018 £m
Amounts due within one year:		
Other creditors	564	567
Contingent consideration payable	22	14
Amounts owed to Group undertakings	23	29
	609	610

The company has guaranteed debt issued by its subsidiary companies from two of which it receives fees. In aggregate, the company has outstanding guarantees over £27.8 billion of debt instruments (2018 – £22.2 billion). The amounts due from the subsidiary company in relation to these guarantee fees will be recovered over the life of the bonds and are disclosed within 'Trade and other receivables' (see Note F).

I) Provisions for liabilities

	2019	2018
	£m	£m
At 1 January	16	27
Exchange adjustments	_	2
Charge for the year	5	16
Utilised	(17)	(29)
At 31 December	4	16

The provisions relate to a number of legal and other disputes in which the company is currently involved.

J) Other non-current liabilities

	2019	2018
	£m	£m
Contingent consideration payable	317	282
	317	282

The contingent consideration relates to the amount payable for the acquisition in 2015 of the Novartis Vaccines portfolio. The current year liability is included within 'Trade and other payables'.

Notes to the company balance sheet - UK GAAP

(including FRS 101 'Reduced Disclosure Framework') continued

K) Share capital and share premium account

	Ordinary Share	Ordinary Shares of 25p each	
	Number	£m	£m
Share capital issued and fully paid			
At 1 January 2018	5,372,553,820	1,343	3,019
Issued under employee share schemes	6,513,804	2	72
At 31 December 2018	5,379,067,624	1,345	3,091
Issued under employee share schemes	4,034,607	1	50
Ordinary shares acquired by ESOP trusts	_	_	33
At 31 December 2019	5,383,102,231	1,346	3,174
	31 December 2019 000		31 December 2018 000
Number of shares issuable under employee share schemes	57,871		56,723
Number of unissued shares not under option	4,559,027		4,564,209

At 31 December 2019, of the issued share capital, 36,365,045 shares were held in the ESOP Trusts, 393,505,950 shares were held as Treasury shares and 4,953,231,236 shares were in free issue. All issued shares are fully paid. The nominal, carrying and market values of the shares held in the ESOP Trusts are disclosed in Note 44, 'Employee share schemes'.

L) Retained earnings

The loss of GlaxoSmithKline plc for the year was £53 million (2018 – £62 million loss). After dividends paid of £3,953 million (2018 – £3,927 million), the effect of £295 million Treasury shares transferred to a subsidiary company (2018 – £nil) and the £34,800 million distribution received of the shares in a subsidiary company, retained earnings at 31 December 2019 stood at £49,206 million (2018 – £18,117 million), of which £38,896 million was unrealised (2018 – £4,096 million). Dividends to shareholders are paid out of the realised profits of the company, which at 31 December 2019 amounted to £10,310 million (2018 – £14,021 million).

M) Group companies

See pages 299 to 310 for a complete list of subsidiaries, associates and joint ventures, which forms part of these financial statements.